



AMERICAN RAILROAD JOURNAL, AND ADVOCATE OF INTERNAL IMPROVEMENTS.

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D. K. MINOR, Editor.]

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AMERICAN RAILROAD JOURNAL, &c.

NEW-YORK, MAY 10, 1834.

SURVEY OF THE NEW-YORK AND ERIE RAILROAD ROUTE.—We are gratified to announce that the Bill which we formerly noticed as being before the Legislature of this State, directing a complete survey at the public expense of the proposed Railway from this city to Lake Erie, through the southern tier of counties, has become a law.

This is a measure of great public importance, and of peculiar interest to this city and to the southern tier of counties: and we design to give it a more extended notice in a subsequent number.

SLOOP CANAL.—Our friends in Oswego are looking forward to a more ready communication between the Atlantic and our great inland seas. We publish to-day the report of a committee upon the project of a Sloop Canal from Lake Ontario to the Hudson.

A Railroad is in contemplation, and will, no doubt, soon be commenced, from Columbus to Augusta. This will so connect the latter place with Charleston, that the communication between Charleston and Columbus will be made in 26 hours—allowing 12 from Charleston to Augusta, and 14 from Augusta to Columbus. From Columbus to Pensacola, 20 hours is a liberal allowance of time. From Pensacola to some suitable point on Mobile Bay, the mail could be carried in 7 hours over land in stages, and thence to New-Orleans, a distance of 160

or 170 miles, in steamboats, it could be carried in 16 hours, making in all *two days and twenty-one hours* from Charleston to New-Orleans. To this add the time required by the steam-packets running between Charleston and New-York, (72 hours,) and the result shows that, with the aid of our Railroad, and that from Augusta to Columbus, to connect with the railroad already completed from Charleston to Augusta, the communication between New-York and New-Orleans would be made in *five days and twenty-one hours*.

To these facts, which ought to be impressed upon every mind, it is proper to add, that there is perhaps no country equal in extent in the Union, over which a railroad could be constructed at so small an expense as over the route from this place to Columbus. It is a level ridge throughout the whole distance, and the choicest timber for the construction of such a work is growing in the greatest abundance upon the very ground which the railroad would occupy.—[Pensacola Gazette.]

DELAWARE AND RARITAN CANAL.—On the 28th, two boats, loaded with coal, from Mauch Chunk, arrived at the Easter Basin in Trenton, via the Delaware Canal, Penn. They came up the river from Bristol, and entered our canal at Bordentown.

These are the first arrivals at Trenton from Mauch Chunk, by the canal. The feeder, we understand, is navigable to Lambertville for boats. The main Canal is also navigable for boats from Bordentown to Kingston; several with lumber have passed from Trenton to Princeton or Kingston this week, and a number have come down the feeder loaded with stone for the new Penitentiary.—[Trenton State Gazette.]

WISCONSIN PORTAGE CANAL.—By the following act of the Legislative Council of Michigan, it will be seen that a regular water communication is to be opened between Fox and Wisconsin rivers, or between Green Bay and the Mississippi at Prairie du Chien :

AN ACT TO INCORPORATE THE PORTAGE CANAL COMPANY.

SECTION I. *Be it enacted by the Legislative Council of the Territory of Michigan,* That such persons as may hereafter become stockholders therein, shall be, and they are hereby declared to be, a body corporate and politic, under the name and style of "the Portage Canal Company," and as such corporation they are hereby declared capable of suing and being sued, answering and being answered unto, impleading and being

impleaded, defending and being defended, in all courts and places whatsoever, and in all manner of actions, suits, complaints, matters, and causes whatsoever: And the said company shall have continued succession for the term of twenty-five years, and may have a common seal, and change the same at pleasure, and shall be in law capable of purchasing, holding, and conveying any estate, real or personal, for the use of said corporation.

SEC. II. The capital stock of said company shall be fifty thousand dollars, to consist of one thousand shares of fifty dollars each; and books to receive subscriptions towards constituting said stock may be opened by each of the following persons: Daniel Whitney, Charles R. Brush, Daniel Jackson, John P. Arndt, Henry G. Soulard, Nathan Godell, and John Larre, who are hereby appointed the first directors, and are authorized to elect their president from their own number, and to conduct every operation of said company until the first Monday in September next; and the subscriptions aforesaid shall continue open until the whole number of shares are subscribed; and if the subscriptions to the said capital stock shall on the first Monday in September next exceed the amount authorized by this section, it shall be the duty of the directors to meet and apportion the said stock among the subscribers thereto, in such manner that no person may have less than five shares if he subscribe for so many.

SEC. III. Five dollars on each share shall be paid at the time of subscribing to the said directors, and the balance in such instalments and at such times as the directors for the time being may require: Provided, that no instalment shall exceed ten dollars on each share; and previous notice shall be given whenever the payment of any instalment is required, by advertisement in a newspaper, printed three successive weeks, in the Territory or State in which the said canal is situated. The shares of the capital stock shall be deemed personal estate, and transferable in such manner as shall be prescribed in the by-laws of said company.

SEC. IV. The said directors may commence and continue the operations of said company, as soon as they may think the stock subscribed sufficient therefor.

SEC. V. Whenever any stockholder shall fail to comply with any call or demand for the payment of any instalment, he or she shall forfeit his or her shares, and any previous payments made thereon; and it shall be lawful for the said company to make division of the surplus capital and net profits which shall accrue thereon from time to time, in such manner as the directors shall see fit, or to employ the same in the purchase of any stock of any company incorporated by the laws of the Territory, or in any other manner to dispose and use the same for the benefit of the stockholders therein: Provided, that nothing herein contained shall confer upon said company banking privileges.

SEC. VI. The said company shall within five years after the passage of this act construct and complete a canal to connect the waters of the Fox and Wisconsin rivers, at or near the place known as the "Wisconsin Portage," in the counties of Brown and Iowa, of sufficient depth and width to admit the passage of such craft as are usually employed in the carrying trade on the said rivers, and properly secured at the extremities by guard-locks, or such other means as may be requisite to prevent the flowing, by means of said canal, of either of said streams into the other: Provided, that nothing in this act contained shall be so construed as to give to said company any privilege which might tend to impair the facilities which at present exist for the passage of boats and property on the said portage, but the same shall remain in as simple a manner as if this act had not passed.

SEC. VII. The election of directors shall take place annually the first Monday in September, and public notice thereof shall be posted up in three public places, or published in a paper printed in the county of Brown, for three weeks previous to the time of holding any such election. At the time and place appointed in said notice, the stockholders present, either in person or by proxy, shall proceed to elect by ballot seven directors, who shall hold their offices for one year, and until others are elected in their places, and are qualified. The said directors shall immediately on their election, or within ten days thereafter, take an oath, or affirmation, for the faithful discharge of their duties, and shall, by a majority of vote, select one of their number to be president; and the said president and directors may meet from time to time, at such places as they may find expedient, and shall have power to conduct by a majority all the concerns of said company, to make such by-laws, rules, and regulations, not repugnant to the laws of the United States, or of this Territory, as they shall deem necessary for the well ordering of the affairs of the said corporation, and in case of vacancy by death, or resignation, or otherwise, in the office of director, the other directors in office may supply such vacancy by a majority of votes until the next annual election. The president and directors may appoint a president *pro tem.*, to preside at said meetings, and to do all other acts that the said president might or could do.

SEC. VIII. In case any election shall not be held at the time when the same ought to have been held, the directors in office shall appoint another day for holding the same, giving the like notice required of any annual election: Provided, the said directors in

office shall be incapable of transacting any other business except in regard to said election after the annual election day.

SEC. IX. Five directors shall be a quorum to transact the business of said company, and any acts of the majority so met shall be binding upon the company; and the said directors shall have power to appoint and remove at pleasure such sub-officers, agents, clerks, artists, and workmen, as shall be necessary for executing the business of said company.

SEC. X. The company shall have power to erect piers, wharves, warehouses, and other necessary buildings and improvements, in and about said canal for commercial purposes.

SEC. XI. Said company shall be compelled at all times to allow the passage of any boat or water craft through said canal, upon the demand of any person, on payment of such toll or duty as the directors of said company may prescribe: Provided, that the toll to be exacted for the passage thereof shall never exceed five cents per hundred for any property which may be transported thereon, or forty cents per ton burthen for any boat or other craft which shall be admitted through said canal: Provided further, that the tonnage of no boat or other craft, which shall be admitted through said canal, shall be estimated at less than three tons burthen; and said directors are hereby authorized so to estimate all boats or water craft of less than three tons burthen, and to charge toll accordingly; but if more than one boat of less than three tons burthen shall be ready to pass said lock at the same time, they shall be received until the lock is full, and no more toll than for three tons burthen shall be charged upon the whole, unless their tonnage shall actually exceed three tons.

SEC. XII. The privileges granted by this act shall be vested in said company for the term of twenty-five years: Provided, that the said canal shall be completed on or before the ninth day of March, which will be in the year eighteen hundred and thirty-nine.

SEC. XIII. Said company may purchase any land, or lands, of the owners thereof, through which said canal may pass, but no part of this act shall be so construed to give any right to said company to occupy the land of any individual or individuals without first obtaining their consent.

SEC. XIV. The property of every individual vested in the said corporate funds shall be liable to be taken in execution for the payment of his or her just debts, in such manner as is or may be prescribed by law: Provided, that all debts due to said company shall be first paid and discharged.

Approved March 7, 1834.

Territory of Michigan, ss.

This shall certify to all whom it may concern, that the foregoing is a true copy of the original act, entitled "An Act to incorporate the Portage Canal Company," now on file in the Office of the Secretary of Michigan Territory.

L. S.

In testimony whereof I have hereunto set my hand and affixed the Seal of the Territory, this 10th day of March, A. D. 1834.

STEVENS T. MASON,
Secretary of the Territory.

LEGISLATURE OF NEW YORK.

In Assembly, April 14, 1834.

Report of the Select Committee on the Petition of Inhabitants of the County of Oswego.

Mr. O. Robinson, from the select committee to whom was referred the petition of sundry inhabitants of the county of Oswego, praying for the passage of an act directing the exploration and survey of an improved navigation from Lake Ontario to the Hudson river, adapted to the tonnage of vessels navigating those waters, and proportioned to the capacity of the supply of water from the lakes, rivers, and streams which may be made tributary thereto, and for a plan and estimate of the cost of the same; and for a survey, plan, and estimate of an improved navigation of the same capacity of the Seneca river, to its communication with the Seneca and Cayuga lakes, and for a report thereof to the next Legislature,

REPORTED:

That the subject referred to the committee, in whatever light it may be viewed, may justly be considered of the first importance, both to the enterprise and interest of the State of New-York. The citizens of this State have witnessed with high satisfaction the commencement, completion, and successful operation of the Erie canal, which has more than answered the expectations of its ardent and patriotic projectors. The value of property has been multiplied many fold; the arm of industry has converted the almost interminable regions of the forest in the western part of the State into fertile fields, enriching alike the hardy cultivator and the great commercial emporium of the State; cities and villages have arisen as if by enchantment, where, but for the Erie canal, would now have been a wilderness. Great and important have been the results of these works of internal improvement, not only to this State, but to a portion of the territory bordering upon the basin of the great western lakes. Let it not be supposed that the resources of western New-York are exhausted, or that she has arrived at that point in commercial and agricultural enterprise beyond which she cannot and will not pass. The spirited and enterprising citizens of that section of the State are now calling the attention of the Legislature to the construction of a canal from Rochester, up the valley of the Genesee, to Olean on the Allegany, the distance of 96 miles. Another project of equal importance is now in contemplation to unite the fertile regions of the north with the valley of the Mohawk, by means of a canal from Rome to the high falls of the Black river. Complete the Chenango canal and the improvements already commenced, double the locks upon the Erie canal east of Syracuse, construct those canals in contemplation, and your committee confidently predict, that in ten years the Erie canal will not be adequate to the business of our own State, and the products of the west will be forced to find an outlet to the Atlantic through some other channel.

Three great objects were primarily contemplated in constructing the Erie canal: First, to furnish the citizens of this State with an easy and cheap conveyance of their surplus produce to market; second, to secure and preserve the trade of the west; third, revenue.

The first of these objects has been attained, and the attention of your committee has been principally directed to a consideration of the second. That to secure and preserve the trade of the west is an object worthy the continued exertions and resources of the "empire State," cannot and will not be denied; that it is so secured may well be doubted. The importance of the western trade will be seen by a view of the vast extent of country bordering upon and surrounding the western lakes; a region of country more fertile and productive than the sun in his course through heaven does not shine upon. If we glance an eye over the immense regions connected by the western lakes

and their tributary streams, if we regard the fertility of soil, the multiplicity of product, which characterize those regions, and if we combine these advantages afforded by nature with the moral energy of the free and active people who are spreading their increasing millions over its surface, what a vista through the darkness of time opens upon us! We see arts, science, industry and social happiness already increasing in those countries, beyond what the most inflated fancy would have dared to hope, thirty or forty years ago.

As yet the commercial and agricultural resources of the west are not developed. These twin sisters of the wealth of nations are yet in their infancy. Owing to the rapid increase of population in Ohio, and the wild and uncultivated state of a portion of her territory, the surplus productions of her farmers have until recently been consumed within her own territory. Michigan and Illinois, comparatively speaking, have furnished nothing for transportation; but when their exhaustless soil shall be cultivated and improved by the hardy and industrious yeomanry of the north and east, who are emigrating thither to a degree unprecedented in the annals of our country, their rich productions will be put afloat and will find a market upon the shores of the Atlantic, through such channel as presents safety, cheapness and speed, and to the most advantageous market. The citizens of the west have witnessed the commencement, progress, completion, and effect of the splendid system of internal improvements in this State, and are nobly imitating the example with an enterprize and zeal worthy their character. Already are the head waters of the Mississippi connected at different places with the great chain of western lakes, by means of canals and railroads. The channels of communication now opened, and which will hereafter be opened between the lakes and the interior, will be thronged with vehicles of transportation, conveying the rich fruits of the labors of millions of free and happy people to flourishing cities and villages upon the shores of the lakes, whose population, wealth, and enterprize, will be equalled only by those upon the shores of the Atlantic.

The surplus productions of this extensive region will find their way to the Atlantic. Natural communications possess facilities and advantages which artificial never will and never can. Lake and river navigation is being understood. Steam power has changed every thing. Twenty-three by-gone years have witnessed improvements in commercial facilities in our own State which have claimed the admiration and imitation of the world.

The lethargy under which the people of Canada have slumbered for the last century has been thrown off, and they are now fully awake to the importance of internal improvements. They are beginning to appreciate the natural water communications with which nature has so bountifully supplied them. They have entered the lists and are nobly contending for a participation in, if not a monopoly of, the rich dowry of the western trade. Their enterprize has caused a communication to be opened around the Falls of Niagara, a distance of forty-one miles, by which vessels carrying 1,000 barrels of flour can go through without being lightened, at an expense of one cent per barrel, exclusive of tolls. The amount of business done upon this canal will be seen by reference to the fact, that 5,000 barrels of salt passed through during the last season, and had the requisite repairs been made, so as to have opened the canal with the commencement of lake navigation, the revenue would have amounted to more than 50,000 dollars.

The evil which the Canal Commissioners feared in 1812 now really exists. The produce designed for transportation upon the Upper Lakes is now let down to Lake Ontario by means of this canal with facility, and for a trifling expense. The prediction of the Canal

Commissioners, "that articles for exportation, when once afloat on Lake Ontario, would, generally speaking, go to Montreal, unless our British neighbors were blind to their own interests," is now fully verified. By a reference to the parliamentary proceedings of the Canadas during the last winter, it will appear obvious that they are not thus blind; that, on the contrary, they duly appreciate the importance of this trade, and that the greatest industry, activity, and talent, are employed in the attainment of further improvements on the most magnificent scale. Appropriations have already been made for the improvement of the St. Lawrence, by which it is intended to connect the Atlantic with the lakes by ship and steamboat navigation. Let them make the Welland canal and the St. Lawrence navigable, as they purpose to do, and which they will do, for steamboats, and Cleveland will be within a sixty hours' ride of Montreal. When these improvements are completed, vessels of 300 tons can load at Chicago, at Cleveland, at Detroit, at Oswego, and other ports on the lakes, and deliver their cargoes at foreign ports. When direct exportation has once succeeded, direct importation will follow as a matter of course. When the Welland canal shall be completed, and the St. Lawrence improved, as designed, goods may be delivered at Cleveland from London for less than one-half what it now costs by the way of New-York and the Erie canal. Make the Erie canal a public highway, and the Canadian route will be preferable by one-quarter in point of expense. The vast superiority in the great point of economy in transportation, effected upon natural water communication, admitting of navigation by large vessels or steamboats, above transportation upon canals and railroads, has been satisfactorily proved by experience on the Hudson, the lakes, and the great rivers of the west. Even at the present reduced rates of toll upon the Erie canal, river transportation has the advantage by more than 300 per cent. The charge upon the transportation of wheat, per bushel, from Troy to New-York, is three cents, while the same transportation for a like distance upon the canal cannot be effected for less than ten cents.

The importance of the western trade has aroused a spirit of enterprize and competition in sister States. To participate in this trade, rival canals and railroads have been constructed in Pennsylvania, Maryland and Virginia, and it cannot be denied that these are already diverting a part of that trade from its natural current towards the lakes and the Erie canal, and will no doubt continue to produce such diversion in a ratio regularly augmented in their progress to completion. It cannot be questioned that a great portion of the produce and merchandize going to and coming from the fertile countries at some distance south of the great chain of the lakes, and east and north of the tributary streams of the Mississippi, must find their way into Virginia, Maryland and Pennsylvania. To prevent this diversion, the tolls upon the Erie and Ohio canals have been very judiciously reduced during the present winter.

The State of Pennsylvania has already declared, through one of her Senators in Congress, (Mr. Wilkins,) during its present session, her determination "still to go on in the advancement of her great system of internal improvements." She would not stop short in her great works. No combination would have the power to arrest her progress, until she should have accomplished her ultimate object, of depriving the empire State of New-York of all the carrying trade of the west. To this great point Pennsylvania was rapidly advancing, and under the wise administration of her State Government, she would not stop short of its accomplishment. She was engaged in an honorable rivalry with the empire State of New-York for the rich dowry of the western trade, and she would not stop until she should

have obtained the treasure." These works, then, which have cost Pennsylvania such enormous amounts, will be sustained, should they pay nothing but the annual repairs required to keep them in order. But Pennsylvania has obstacles to surmount of no ordinary character, before she will witness the consummation of the objects declared by the honorable Senator. Nature has interposed an insurmountable barrier to the construction of canals from the navigable waters leading to her commercial emporium and the Ohio. That Pennsylvania does possess advantages over New-York cannot be concealed or denied. Their canal and railroads were in successful operation for the present season before the 20th of March last, while our canals must remain closed by the frigid laws of nature, on an average of seasons, until the middle of April. Goods were delivered at Pittsburgh on the 26th of March, in eleven days from Philadelphia, and before our canals are opened, will be delivered at the Sault St. Marie or Chicago. It is said too, that the Pennsylvania route possesses a decided advantage, in point of time and expense; that merchandize can be delivered in fourteen days at Cincinnati from Philadelphia, while from New-York, by the Erie and Ohio canals, it will require from twenty to twenty-five days, and frequently much longer; and that the expense of transportation from Philadelphia to Cincinnati, during the present season, will be \$1.80 per hundred, while from New-York to Portsmouth on the Ohio \$2.06.

That the trade of the west is of vast importance, and is becoming yearly more and more important to the commercial interests of this State, cannot admit of doubt; and that there is danger of its being diverted, or a portion of it at least, through other channels than the Erie canal, to the Atlantic, your committee think is equally apparent.

In the spirit of enterprize and rivalry with which our southern and northern neighbors are actuated, your committee see no cause for serious apprehension, jealousy, or alarm, because they believe it is within the power of this State to secure the trade of the west beyond the reach of competition or rivalry.

The remedy and only remedy which can be applied to secure to ourselves and posterity this rich inheritance of national wealth, is by opening a communication between the Hudson and lakes Ontario, Seneca, Cayuga and Onondaga, of sufficient magnitude to admit the passage of the smaller class of steamboats, and of the ordinary vessels which navigate those waters. The advantage to be derived from such a communication must be apparent to all. It will combine safety, cheapness and expedition, the three great considerations in commercial enterprize, and save the loss and expense attendant upon numerous transshipments.

That such a communication is entirely practicable, your committee entertain no doubt. Whether the object can be better accomplished by improving the Mohawk river, Fish creek, and from thence into Onondaga lake and down the outlet to Three River point, and thence down the Oswego river to Lake Ontario; or by enlarging the Erie canal and the Oneida lake side cut, and thence to Lake Ontario by the Oneida lake and river, and the Oswego river, your committee are unable to form an opinion, not possessing the requisite information. Upon the practicability and necessity of carrying this project into execution, your committee have been referred to a communication from Benjamin Wright, Esq., late chief engineer of the New-York canals, addressed to Joseph Bloomfield, Esq., which is hereto attached, and to which they beg leave to refer, as a paper containing much valuable information.

As to the expense of opening such communication, your committee possess no correct information upon which to base an opinion.

Comparing, however, the estimates of Judge Wright in relation to the St. Lawrence canal, and estimates which have been made as to the expense of opening all the proposed channels of communication from Utica to Oneida lake, and from thence to Ontario, Onondaga, Cayuga and Seneca lakes, (which latter is estimated at less than \$900,000,) the cost will, when contrasted with the important results, be but trifling.

The amount of revenue to be derived from transportation is difficult to be imagined, and much more difficult to be ascertained. Judging, however, of the future from the past and the present, we may safely come to the conclusion, that ten years will not elapse, after the completion of the proposed project, before we witness the same busy scenes upon its waters that we do now upon the Erie canal. Calculation, like our advance in numbers, outruns fancy. "Things which twenty years ago a man would have been laughed at for believing, we now see. At that time, the most ardent mind, proceeding on established facts by the unerring rules of arithmetic, was obliged to drop the pen at results which imagination could not embrace."

The Erie canal is but a carrying place between the Hudson and the great lakes. It bears about the same proportion to the amount of business which is done between those waters now, as the Great Western turnpike did twenty years since. Proportionably to the wants of the country it affords about the same facilities.

Your committee here adopt with satisfaction, and in their opinion with particular propriety, the language of the Canal Commissioners, in their report before referred to. "The life of an individual is short. The time is not distant when those who make this report will have passed away. But no term is fixed to the existence of a State, and the first wish of a patriot's heart is, that his own may be immortal. But whatever limit may have been assigned to New-York by those eternal decrees which established the heavens and the earth, it is hardly to be expected that she will be blotted from the lists of political societies before the effects here stated shall have been sensibly felt. And even when, by the flow of that perpetual stream which bears all human institutions away, our constitution shall be dissolved and our laws be lost, still the descendants of our children's children shall remain. The same mountains will stand, the same rivers run, new moral combinations will be formed on the old physical foundations, and the extended line of remote posterity, after a lapse of two thousand years, and the ravage of repeated revolutions, when the record of history shall have been obliterated, and the tongue of tradition, the shadowy remembrance of ancient events into childish tales of miracle, this national work shall remain. It shall bear testimony to the genius, the learning, the industry and intelligence, of the present age."

It is unnecessary for your committee to dwell on the advantages which the commerce of the State must derive from opening a scene so vast to its incessant activity, and to the influence which must result from holding beyond the reach of rivalry and competition, a key to the commerce of our western world. They are known and will be duly appreciated by the intelligent people of this State.

Deeply impressed with the importance of the subject, your committee are of opinion that speedy measures ought to be adopted to carry into effect the prayer of the petitioners. In pursuance of these views and opinions, your committee have prepared a bill, which they now ask leave to introduce.

DOCUMENT.

Letter from Benjamin Wright, Esq.

New-York, April 1, 1834.

Dear Sir,—Your favor of 29th ult. is before me, and I will endeavor to give you all the in-

formation in my power touching the subject of your letter. The project which the Canadians have in hand to make a steamboat canal of 10 feet water, to pass all the rapids between Montreal and Ogdensburg, or Lake Ontario, is one which has a very important bearing, in its consequences, upon the people of the State of New-York, and the Erie canal tolls. It is certain to my mind, that with such a canal as I have projected along the St. Lawrence, and the Welland canal, in good order, that all the products of the soil, from all the Upper Lakes, can be carried to tide water a great deal cheaper by this route than they can ever be done by the Erie canal, or any other work.

The plan of the improvements as projected along the St. Lawrence, is to make short canals and locks around the rapids, leaving the steamboat to navigate the river and lakes in all the intermediate spaces. The whole length of all these canals, (although in seven or eight different pieces,) does not exceed 31 miles and about 175 feet of lockage. This can be executed for about three millions dollars, and completed in three years from the time it is commenced, if they choose to do so.

That the Welland canal can and will be put in good order, there is no doubt, as it appears by the measures adopted at the late session of their parliament, that they intend to make it a government work, and will no doubt do so next winter.

The question now arises, what shall be done by the state of New-York to retain the trade of the Upper Lakes to her great commercial port, under all these views of the matter? I see no better plan than your memorial, adopted by the people of Utica, suggests, viz.: by a large canal to the Oneida lake, or rather to a certain point on Fish creek, where 8 feet water can be at all times carried to the lake; thence through the lake, and down the outlet to Three Rivers, and then down the Oswego river. And I see by your letter, that your views extend to branching off up the Seneca river, to Cayuga lake: this would be a very good addition to the whole project.

You ask me to give my views of the expense of such a work from Utica to the Oneida lake, upon the plan you propose, of 60 feet canal width and 8 feet depth, with locks the size of the Welland canal, which is 110 feet by 22 in the chamber.

As I know the country well, from having surveyed it, I see no point of extra expense in the canal, except in passing the Rome summit, and the plan of getting over Oriskany creek, Sedaque; these latter, I do not think, would present any very formidable obstacles to good engineers; but I have not sufficiently digested a plan of the project that would enable me to even approximate the expense. I know that you must look for water either from Fish creek, to the Rome summit, or from Black river. The former would not be expensive, as I know, and have surveyed, a route where it may be brought easy and cheap.

This project would, if executed, enable vessels of 130 to 140* tons, to navigate on the large rivers and lakes with sails, and on the canals be towed by horses, or it would permit steamboats of certain construction, with wheel in stern, to pass through—such boats, from a model I have seen, would carry 100 tons of goods or produce.

The expense of such a project can only be known by a regular survey, and such survey ought to be made by an engineer who knows the formation of the whole country and can adapt his plan to a good and cheap work, and overcome the various difficulties best.

I have not said anything about the competition which is to be looked for from Pennsylvania, if she goes on to form a connection between her canal at Pittsburgh with the Ohio canal at Akron. This latter place is about 40 miles

*Vessels of this tonnage measurement will carry 250 tons dead weight.—J. E. B.

from Cleveland, on Lake Erie, and we see already that Pennsylvania has been this year navigating her canals since about the 10th of March. The truth is, and we ought not to disguise it, that Pennsylvania can navigate three or four weeks earlier than we can, and even Canada can open her Welland canal nearly one month earlier than we can our Erie canal, and the St. Lawrence canal can be navigated earlier than our canals if they pay a little attention to management to clear the ice. That the project of making a canal of the size I have named from Utica to Oneida lake is feasible at an expense not alarming, is certainly true; indeed, with the exception of the difficulties at the summit and east of it, all the country is as favorable as you can wish or desire. That such canal will be able to transport much cheaper than the present canal, taking into consideration that such a large portion of distance between Oswego and Utica is natural waters, there can be no doubt; and that the time will soon arrive when we must expect competitors for that lake trade, is also certain; and in the race for this important object, it is of vital importance that we should have early and sound information on every point relating to this matter, so as to act promptly and definitively when we do act, cannot be doubted.

If such a project was well executed so far as from Oswego to Utica, there is no doubt its advantages would be such as to show the propriety of conveying it on to some proper point of the Hudson, and then we should see whether we cannot compete successfully with any of our neighbors, north or south of us. The prize contending for is a grand one, and well worthy of the exertions of the state of New-York.

Permit me to make one remark before I close as to the Oneida river, below Oneida lake. I have understood that some surveys have been made to estimate the expense of overcoming the three rapids in the 18 miles of this river between Oneida lake and Three River point. Let me say that great care is necessary, to prevent injury to the country, by dams, across this river, which I have heard is the plan proposed. There is a great extent of flat country along this river, and no dams ought to be made on any account. From a perfect knowledge of this river, and the country along it, I am decidedly of opinion that the improvements ought to be by short canals and locks. One at the outlet of the lake would be about one mile, one at Cockederoys 3 mile, and one at Oak Orchard, say one mile, all the other parts of the river are, or may easily be made, 8 feet water, and this would do no injury to the country.

I have suggested the above from my wish to see every improvement of this kind, when attempted, done right, and I know too well the evils to a country to have a pernicious plan of such works adopted.

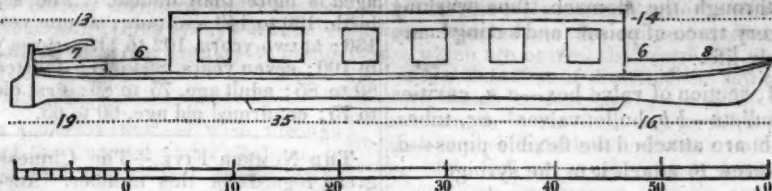
I am not perfectly satisfied with the size of the locks and canal as you proposed, I should prefer locks 24 and 26 feet wide and a canal not less than 75 to 80 feet on the surface. However, this is a future consideration, and when orders are given for the survey, the estimate can be made on as many different plans as shall be thought advisable.

With great respect and esteem, I am, dear sir, your obedient serv't,

BENJ. WRIGHT.

JOSEPH E. BLOOMFIELD, Esq.

THE RAILROAD.—We learn with pleasure that the Tusculum, Courtland and Decatur Railroad Company has agreed that their road may form a link in the grand chain of internal improvement, by which it is contemplated to unite the Atlantic Ocean with the Mississippi river, at some convenient point above New-Orleans.



The Paisley Canal Passage-Boats. By JAMES WHITELAW. [From the London Mechanics' Magazine.]

Sir,—As your correspondents have been requested to forward to you information respecting the light gig-shaped boats lately introduced upon canals, I send you the following account of the Paisley canal passage-boats, from which account I think it will be seen that the skiffing, for rising to the surface of the water principle, so much insisted on by Mr. Macneill, has little to do with their quick rate of sailing.

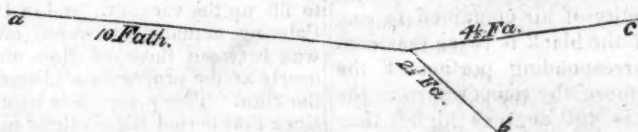
Description of one of the Boats.—The length is 70 feet, width 6 feet, and 1 foot 10 inches is the depth. With ninety passengers, which is as many as a boat can conveniently take, the draught of water is 19½ inches; when all the passengers are out the draught is only 5½ inches. The rudder is 2 feet long and 20 inches deep, and its bottom is in a line with the under side of the keel. The weight of the iron work is 17 cwt.; and the weight when the boat is finished is 33 cwt. The prefixed figure is a side view of one of the boats. The windows in front light the cabin, and those behind are for the steerage. The part at the bow marked 8 feet, is a deck for the passengers, and the part marked 6 feet, has seats round it. The 6 feet towards the stern is for the same purpose as the 6 feet in front, and the 7 feet is a deck on which the steersman stands; under each deck is a place for any light luggage. The keel is 35 feet long, the part in front (under the boat) marked 16 feet, and that behind, marked 19 feet, have no keel; this allows the boat to turn quicker. A line stretched from the highest point in the bow to the highest point in the stern, would rise about 6 inches above the lowest part of the gunnel. The depth of the keel is 5 inches; and this depth did not form part of

the measures given above, of the draught of water, and the depth of the boat. The plates are of 16th wire-gauge. The ribs are made of light gunnel-iron; and a rim of the same goes round the inside of the top edge of the boat, on which the wooden gunnel is fixed by means of square-headed screws. There are light ribs of wood laid inside of the boat, on which the flooring is nailed, and a broad stripe of wood runs between the seats and the windows, so high that the passengers may rest their backs upon it. The cotton oiled cloth, which covers the cabin and steerage, requires three very thin coats of boiled oil to make it water-tight, and it should be dried in the sun if possible: very light curved ribs, set about two feet apart, support the cloth overhead, and it is fixed to the frames of the windows, &c., at the sides of the boat. A boat of this kind can be finished in a most comfortable style for £130. The cost of the iron-work is £70, and £60 will pay the joiner and other work of the boat.

The hooks (there is one on each side), on which the towing-line is fixed, are fastened to the gunnel of the boat at about 15 feet from the bow; the rope is put on one of these, when the boat is not very much loaded; but when there are a great many passengers, the rope is fixed about 3 feet 6 inches nearer the bow; this helps the boat round the turns on the canal. The shape of the hook is as represented in the following sketch, to prevent the rope, any time it slacks, from falling off.



As the Paisley canal is a very winding one, the longest towing-line that can be used on it is as follows:



a, is the end connected to the boat; b, is fixed to the one horse, and c, to the other. If the rope were longer than this, it would draw the boat against the side, at a quick bend on the canal. The horse in front has blinders on it, and a boy rides on the one behind. The harness must be as light as possible. If the horses are run 12 miles a day, they keep in excellent order, but 16 miles per day is too much for them. The horses are changed every 4 miles. Half blood horses, or a breed between half blood and full blood, answer best.

The canal is 30 feet wide, except at the bridges, where it is only 11 feet, and there are two or three more contracted places on it, of considerable length. The average depth of the canal is 4 feet 6 inches. The sides of the canal are lined by a perpendicular wall, built of small stones, which goes 10 or 11 inches below the surface of the water, and as much above it. The distance from Glasgow to Paisley is 7½ miles by the canal, and the distance from Glasgow to Johnstone is more than 11 miles. The boats run the distance between Glasgow and Paisley in 50 minutes, and take in and put out a good many passengers at different places on the way; and the distance from Paisley to Johnstone is run over in a time proportionably short. The cabin fare is 9d., and the steerage fare is 6d., from Glasgow to Paisley. When passengers go from Glasgow to Johnstone, they

are charged 1s. in the cabin, and 9d. in the steerage.

The best speed for the Paisley canal boats is greater than 9 miles an hour; and this velocity occasions a very little and gradual swell, not more than 7 inches high on the canal; there is no wave whatever at or before the bow of the boat, and the water is lower than the surface of the canal just behind the bow; it then begins to rise, and the wave reaches its maximum elevation at about two-thirds of the length of the boat from its bow; at the stern the elevation of the wave is nothing, and any ripple that follows the boat is occasioned by the action of the rudder to turn the boat. At the best velocity the horses have not a heavy pull; but when the boat is drawn so slow as 6 or 7 miles an hour, the strain on the towing-line is very great, and waves rise in front of the boat more than 18 inches high, and wash over the banks of the canal. On account of the boat's being so light, it may be brought from its maximum speed to a state of rest without raising a wave in front; and for the same reason it may be brought from a state of rest to its greatest speed before a very high wave has time to rise. At the bridges the wave at the side of the boat is rather more than 9 inches high when the boat is going at its best velocity; and when two of the boats pass each other at a quick rate, the wave is not worse than this. When two boats

pass, the horses of one of them stop just before they come opposite the horses of the other boat, and a boatman takes the tow-line off its hook and holds it, in case it should come in contact with the bottom of the other boat, which is passing it at its full speed. As far as I know, no accident has happened since these boats have been put upon the canal, and the trade has increased very much.

When the speed of the boat is low, the waves rise and get a great way ahead of it; if the velocity is increased to a certain extent, the boat keeps up to the wave; and if it sail quicker still, the bow gets before the swell, which decreases in height as the velocity of the boat increases—in the highest velocities, at least, that I have seen the boat brought up to. From this it would appear that the wave has a determinate velocity, like the undulations that cause sound—at any rate, it has a maximum velocity; and if the whole cause of the formation of the wave continues when the boat goes quicker than its motion, the wave will fall behind. Now there is a vacuum formed towards the stern of every vessel when it is sailing; this, together with the height at which the wave stands above the level of the canal, and the motion of the wave in the direction of the boat, will cause it (the wave) to fall in towards the stern of the vessel, and act on its inclined sides, giving back a great part of the power spent in its formation, if the vessel is properly formed. The water sent towards the sides of the canal by the inclination of the bow, will be reflected from the perpendicular facing on the banks, and act in the same way. The lateral communication of motion among particles going in different directions, may have a tendency to keep down the swell. If this explanation is correct, the boats must have their dimensions and form corresponding to the width of the canal, and the velocity they are to sail at.

As the boat rises on the wave, its bow is up or down, according as the wave is fore or aft, I am, Sir, yours, &c.

JAMES WHITELAW.

CANAL TOLLS.—Since the opening of the canals, the amount of tolls paid to the collector at Albany has averaged about fifteen hundred dollars per day, up to and including the 24th instant, and the receipts have been gradually increasing from day to day. On the 25th, the amount received was \$2,300, and probably about the same on Saturday, the 26th. The receipts at this place, thus far, although less than last year, are fully equal to the tolls for the corresponding period in 1832—notwithstanding the diminution of the receipts by a reduction in the rates of toll, since 1832, of about 35 per cent.

During the first week of navigation, there has been received for tolls at Geneva, the sum of \$3,159 44—and at Salina, the sum of \$6,583 70. These are the most conclusive indications that the real elements of our prosperity are unimpaired.

PRODUCE FROM COXSACKIE.—We are fearful we shall not have the pleasure of reporting so favorably of the present season.

Coxsackie Landing is one of the most flourishing villages on the Hudson. In addition to the sloops employed by the enterprising merchants of that place during the past year, 25 in number, two lines of tow-boats, two boats to each line, have been established there, and will be in operation early in the present season. The principal exports from that place are brick, lime, stone, wood, hay, &c. Some idea of its local trade may be formed from the fact that 15,000,000 brick, 17,000 casks lime, 473,430 feet flagging and paving stone, 5,600 tons hay, and 3,750 cords wood, were shipped during the last year.

Stuyvesant is another large and flourishing village, a few miles above Coxsackie, on the opposite side of the Hudson. The Stuyvesant and Coxsackie steamboat United States, with its barges, commenced its regular trips on the 12th inst.

NEW INVENTED STOMACH PUMP—Description of a New Form of the Stomach Pump.
By P. B. GODDARD, M. D., of Philadelphia.
[From the Journal of the Franklin Institute.]

This pump consists of two parts, one of which I shall call the valve box, the other is an ordinary syringe, of good construction, to which the valve box is screwed when in use.

The valve box is a cylinder of metal, containing ovoidal or egg-shaped cavities, equally distant from the centre of the cylinder; at this point a pipe enters, which, when screwed on to the syringe, opens a communication between its cavity and these two cavities in the valve box. Near each end of the cylinder a short and slightly conical tube projects laterally, to which a flexible tube is to be fastened, and which causes a communication between the flexible tube and the cavity in the valve box. Each of these cavities contains a bullet accurately turned, so as to fit the orifices of the tubes, entering into it, and acting as a valve. It will be seen by reference to the accompanying cut (which is a section of the valve box) that if the valve box be held vertically, and the syringe screwed on it, the bullet in the upper cavity will fall upon the orifice of communication between it and the body of the syringe, whilst the bullet in the lower cavity will, in like manner, lie upon the orifice of the tube leading externally. If the lower tube be now immersed in water, and the piston of the syringe be drawn out, it will be evident that the body of the syringe will be filled with water from the lower tube. If now the piston be pressed home, the water will pass out of the upper tube; the bullet in the lower cavity preventing its escape there, just as the bullet in the upper one prevented the entrance of air before. It will then always pump water, or any other fluid, from the lower tube to the upper.

If the position of the valve box be now reversed, and the end which was above be placed below, the bullets will fall by their own gravity into the opposite ends of the cavities, and the instrument will act as it did before, viz. pumping from the lower orifice to the upper, although the relative position of the tubes has been reversed.

To use this instrument, the valve box must be held in nearly a vertical direction. A long flexible tube being passed into the stomach, is attached to one of the short conical tubes, say the upper, and a short tube leading to a basin is then fastened to the lower one. The basin being filled with warm water, and the syringe put in action, the water will pass into the stomach and dilute the poison. When enough has passed in, the syringe is to be turned in the hand, so as to bring the tube down which was before above, without taking off the flexible tubes, or changing them in any way, and the syringe again put into action. The water will be pumped out of the stomach, bringing the poison along with it.

The following are the chief advantages of this instrument. It is perfectly simple in its construction, and not liable to get out of order.

The directions for its use are easily understood, and as easily remembered.

After the flexible tubes are once adjusted, no alteration is required until the operation is finished.

When the instrument is once put in action,

gallons of water may in a few minutes be passed through the stomach, thus washing away every trace of poison and saving many a valuable life.

Fig. 1, section of valve box—*a a*, cavities for the bullets—*b b*, bullet valves—*c c*, tubes, to which are attached the flexible pipes—*d*, female screw to attach it to the syringe

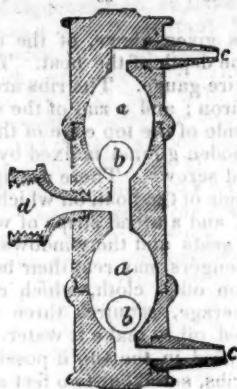
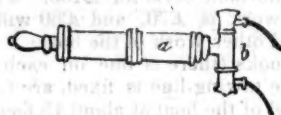


Fig. 2, the entire instrument—*a*, the syringe—*b*, the valve box.



Ericsson's Caloric Engine. By G. K. O.
To the Editor of the Mechanics' Magazine.

SIR,—After reading several times the description of Ericsson's Caloric Engine, contained in your February number, I am yet at a loss in regard to some things. Assuming, as the description does, that the air in the part of the engine represented black is under greater pressure than that in the white, but being of nearly the same temperature, it must be of greater density; for example, let the density of one be represented by 50, and that of the other by 100, that is, the quantity of air contained in any given portion of the black is twice that contained in a corresponding portion of the white part: suppose the temperature in the large cylinder is 480 degrees higher than that in the small one. Now, if 10 cubic feet of air of the density of 100 be admitted into that of 50, it will expand till it becomes of the same density as that into which it is admitted, and occupy nearly 20 cubic feet; and when reduced 480 degrees in temperature, will yet occupy 10 feet. While the large cylinder admits 10 feet of the density of 100, the small one takes out 5 feet of the density of 50, which, though expanded by the heat, would only fill 10 feet of the density of 50; but being admitted into the black part, where the pressure and density is 100, it will become of the same density, and, of course, occupy but 5 feet. If the case be as I have stated, the corresponding portions of the two bodies of air in the black and white parts will soon be brought to the same density by a few strokes of the engine, and (according to the description) the difference of density constitutes the motive power. Will you, or some of your correspondents, please explain this difficulty. Yours, &c. G. K. O.

DR. MAJENDIE'S OBSERVATIONS RESPECTING THE PULSE.—Majendie has given a scale of the pulse, which shows that the difference in

frequency between that of the infant and the aged is more than double. The scale is, at birth, 130 to 140 a minute; at one year, 120 to 130; at two years, 102 to 110; three years, 90 to 100; seven years, 85 to 90; fourteen years, 80 to 85; adult age, 75 to 80; first old age, 65 to 75; confirmed old age, 60 to 65.

THE NUMBER FIVE.—The Chinese have a great regard for this number. According to them there are five elements—water, fire, metals, wood, earth; five perpetual virtues—goodness, justice, honesty, science, and truth; five tastes—sourness, sweetness, bitterness, acidity, and salt; five colors—azure, yellow, flesh-color, white, and black; they say there are five viscera—the liver, the heart, the lungs, the kidneys, and the stomach. They count five organs of the senses—ears, eyes, mouth, nose, and eyebrows. A Chinese author has written a curious dialogue between these senses. The mouth complains that the nose is not only too near, but above her; the nose in reply defends its position, by stating that but for it the mouth would eat stinking meats. The nose in turn complains of being below the eyes; they reply that but for them men would often break their noses.—[Le Lanterne Magique.]

CURIOUS ASTRONOMICAL THEORY.—We state the following on the authority of M. Arago, an eminent French astronomer: If we place in a horizontal line the series of figures of which the law is evident—

0 3 6 12 24 48 96 192

(each double the preceding,) and afterwards add 4 to each, we shall have a series denoting the relative distances of the Planets from the Sun, thus—

4 7 10 16 28 52 100 196

Mercury. Venus. Earth. Mars. * Jupiter Saturn. Uranus.

If 10 represents the distance of the Earth, 4 will be that of Mercury, 7 Venus, 16 Mars, and 52, 100, and 196, the respective distances of Jupiter, Saturn, and Uranus. This law was known as far as 100, before the discovery of Uranus: and the distance being found to correspond, affords a very remarkable confirmation of its truth. But it will be observed there is a deficiency of one term between Mars and Jupiter. This led philosophers to suspect the existence of a planet at the distance required to fill up the vacancy; and in 1801, Piazzi, of Palermo, actually discovered one, whose orbit was between those of Mars and Jupiter, and nearly at the proportional distance of 28 from the Sun. This planet was named Ceres; and since that period three others have been found—Pallas, Juno, and Vesta—all of which have their orbits so near each other as to lead astronomers to believe that these are the fragments of a larger planet, which had been shattered into pieces by some internal explosion, or the shock of a comet.—[London paper.]

FAMILY ALBUM.—We were not long since informed of a practice observed in the family of an excellent widowed lady of this city, which must be of great utility to her children, and which we venture to recommend to the readers of our paper. A folio, if we mistake not, is provided as a place of deposit, into which each member of the family is required to put once a week a piece of written composition, upon any subject that may suggest itself to the mind of the writer. Saturday evening the budget is opened and each piece read, criticised, and amended, in the presence of the family. It is impossible to calculate the advantage to be derived from such a practice, by establishing in early life habits of investigation, and mental improvement. The mother who thus educates her children, may sanguinely anticipate a maturity of usefulness and respectability. Depriving profligacy and low vice can have little to tempt a mind thus early shielded by lessons of purity, domestic happiness, and pleasant fire-side instruction. Give your children an early love for books, refine their taste by

works of art, set them an example of religious excellence, of correct manners, and endeavor to make the domestic hearth always attractive, and you bar up all the great avenues to immortality.—[Portland Courier.]

INGENUOUS CONTRIVANCE.—I wish, through the medium of the Centinel and Palladium, to notice a neat and economical improvement made by Mr. Currier, of this city, respecting bells for houses and hotels. Heretofore there have been separate bells for each apartment. These have been numbered to indicate the apartment where an attendant was wanted. In large establishments numerous bells are necessary, and these are costly, and sometimes not useful if the bell had ceased to sound before it was looked at. In the invention a single bell is sufficient for the largest hotel. The wire from each apartment, while it rings this common bell, communicates motion to a suspended ball over an appropriate number, and its long continued vibrations give, without fail, and without noise, the information that is desired. The expense is comparatively trifling.—[Boston Centinel.]

AGRICULTURE, &c.

SECURING A CROP OF FRUIT ON PEAR TREES.—Take a pair of scissors (such as are used in thinning grapes), and go over the corymbs of flowers, or rather of flower-buds, as soon as they are sufficiently elongated to allow the points of the scissors to pass between them (that is, some days before the blossoms are expanded), and thin them; leaving only five

or six blossoms in each, according to the size of the corymb; always preferring to leave the flowers which have the stoutest stalks, and those which are nearest the centre. This operation has the effect of diverting the sap to the flowers which remain, and gives them sufficient strength to set from one to three fruits in each umbel; which will prove a sufficient crop, and well repay the labor bestowed. Another mode, less tedious than the above, is also practised here, with success, on young trees. It consists in deferring that part of the pruning of them which is termed shortening the young wood, until the blossoms are in about the same state as is described in the above directions for thinning, and then shortening them back to the required length. This also checks the progress of the sap, and enables the tree to set fruit very freely. I am aware that my plan is a tedious one, and one that is almost impracticable on a large scale; but it is decidedly an excellent plan for dwarf trees in gardens, whether they are cultivated in the *quenouille* mode, against walls, or as espaliers; as these trees come within the reach of the hand, of a pair of steps, or of a ladder. In the hope that these remarks may, through your indulgence, avail my fellow-laborers in horticulture, at the coming season, I am, sir, yours, &c.

BERNARD SAUNDERS.

Nursery, Island of Jersey, Dec. 6, 1833.

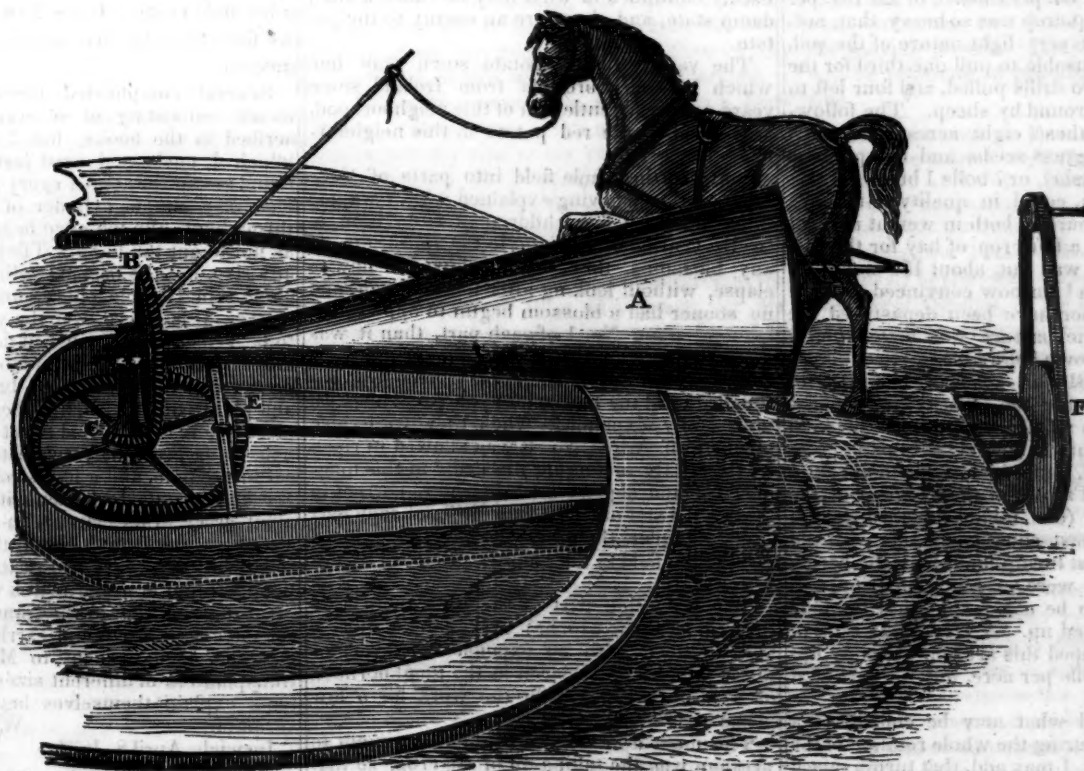
We recommend the above article to the particular attention of young gardeners. The system of disbudding advised in the preceding paper by Mr. Callow, and that of thinning out blossoms suggested in the above paper by Mr. Saunders, are applicable to all fruit trees, and,

if generally adopted, would insure important results. We know an instance of a large apple orchard, the property of a commercial gardener in Kent, in which a knife has never been used: every thing is effected by disbudding, and pinching out young wood with the finger and thumb. The proprietor is not a scientific gardener; and he adopted the above practice from no particular theory, but simply from his own observation and experience, to save labor, and to insure good crops of large fruit. We hope to see his orchard next summer, and to report on it.—[London's Mag.]

UVEDALE'S ST. GERMAIN PEAR.—A fine specimen of this pear has been sent us by Dr. Hamilton of Plymouth: its dimensions are, 13½ inches for the transverse, and 16½ inches for the longitudinal diameter; and its weight is 1 lb. 11½ oz. The tree from which these pears were gathered has, in former years, produced fruit of a considerably larger size, and in much greater abundance, than in the present season, and five years since a pear was gathered from it which weighed above 2½ lbs. —William Hamilton. 15 Oxford Place, Plymouth, Nov. 14, 1833.

CARROTS FOR LIVE STOCK.—The Altrincham carrot, grown in rows 18 inches apart, and the carrots at the same distance from each other in the rows, the roots attaining the thickness of a man's thigh, and the length of three feet, with a vigorously growing top, for feeding cows or other cattle.—[London's Magazine.]

[The seeds of these carrots are for sale by H. Huxley & Co., 81 Barclay street.]



Description and Drawing of Beecher's Portable Horse Power. By the INVENTOR. [For the New-York Farmer and American Gardener's Magazine.]

This power is applicable to all purposes where speed is necessary, particularly to thrashing, grinding, turning, and sawing. Its superiority consists in the simplicity of the gear, only two wheels of 23 and 30 inches, with pinions of 9 and 6 inches, are necessary to get a speed of two to three hundred re-

volutions per minute. The power being obtained by a revolving lever on a smooth surface, it is not liable to break by sudden impact, or stoppage. It requires no frame or building, but is simply fastened to the ground or floor. The lever may be increased in length without diminishing the speed. It may be removed and erected in three hours' time. It can be placed in a back yard or cellar, and it makes no jarring in the building.

REFERENCES.—A, revolving lever; B,

driving wheel; C, nine-inch pinions; E, line shaft; and F, band wheel.

This horse power may be seen in the yard of the Railroad House, 98 Barclay street, New-York. The right to territory may be obtained of the inventor at the above place. Machines of one, two, three, or four horse power furnished to order at 60, 75, 90, and 100 dollars.

A portable cider mill and press to be seen as above.

[To the author of the following Report, the result of five years' practical experience, the thanks of the Society and the honorary Silver Medal were voted by the Directors.]

Report on the Value of Bone-Manure, in comparison with ordinary Farm-Yard Manure.

By the Honorable Captain W. O'GILVY, Airlie Castle.

Mr. Watson, of Keilor, introduced the use of bone manure into Strathmore, having seen it used in England. I am not certain in what year he began to make experiments with it, or to employ it extensively, but I remember well that the great deficiency of farm-yard dung in 1827 (consequent on the almost total failure of the crop of the previous year) first induced me to try 4 acres of turnip without other manure, sown with 15 bushels of bone-dust per acre, which I obtained from Mr. Watson: it cost 3s. per bushel, or £2 5s. per acre. The crop of turnip on these four acres was at least equal to the rest raised with farm-yard manure; but as the whole of the turnips were pulled, and the land received some dung before the succeeding crop, much stress cannot be laid on the circumstance of the following white crop and grass being good.

Next year, 1828, encouraged by the former successful experiment, eight acres were sown with turnip, solely with bone-dust; the soil a light sandy loam; the subsoil gravel and sand, coming in some places nearly to the surface, which is very irregular, but in general has a south exposure. This field had been broken up with a crop of oats in 1827, after having been depastured six years, principally by sheep. The quantity of bone-dust given was 20 bushels per acre, and cost 2s. 6d. per bushel, or £2 10s. per acre. The turnip-crop was so heavy, that, notwithstanding the very light nature of the soil, it was judged advisable to pull one-third for the feeding cattle, two drills pulled, and four left to be eaten on the ground by sheep. The following year, 1829, these eight acres were sown with barley and grass-seeds, and the produce was 57 bolls 1 bushel, or 7 bolls 1 bushel nearly per acre, of grain, equal in quality to the best in the Dundee market, both in weight and color. Next year, a fair crop of hay for that description of land was cut, about 150 stones an acre; and though I am now convinced that the field should rather have been depastured the first year, yet the pasture was better than it had ever been known before for the two following seasons, 1831 and 1832. It is worthy of remark, as a proof of the efficacy of the bone-manure, that in a small angle of this field, in which I had permitted a cottager to plant potatoes, well dunged, and which, after their removal, was included in one of the flakings of the sheep, and had (one might have supposed) thereby had at least equal advantage with the adjacent bone-dust turnip-land, both the barley and grass crops were evidently inferior, and this continued to be observable until the field was again ploughed up. A very bulky crop of oats has been reaped this season, probably upwards of eight bolls per acre, but no part of it is yet thrashed.

Having detailed what may be considered a fair experiment during the whole rotation of the above eight acres, I may add, that turnip raised with bone manure, and fed off with sheep, has now become a regular part of the system on this farm; 15, 20, and, last year, 25 acres were fed off; and invariably with the same favorable results, with the prospect of being able to adopt a five-shift rotation, and to continue it without injury to the land. Every person in the least acquainted with the management of a farm, of which a considerable proportion consists of light, dry, sandy loam, at a distance from town-manure, must be aware of the importance of this, from knowing the expense at which such land was formerly kept in a fair state of cultivation; indeed, the prices of corn for some years past would not warrant the necessary outlay, and large tracts of land, capable of producing barley little inferior to that of Norfolk,

must speedily have been converted into sheep pasture, but for the introduction of bone-manure.

Note.—For the last four years, 25 bushels of bone-dust have been given to the acre; the price this year was 3s. per bushel, or £2 15s. per acre.

[The honorary Silver Medal having been offered as a premium for the best account of experiments made, to ascertain what advantage may be derived from plucking off the flowers of the Potato, it was adjudged to the author of the following Report.]

Report of an Experiment, made at Aberdona, to ascertain the Benefit resulting from the Removal of Potato-Blossoms. BY JAMES MURRAY.

The experiment was made according to the plan laid down by the Highland Society in their list of premiums for 1833.

The quality of the soil was not the best adapted for a very successful potato crop, but as I did not think of making the experiment until after the ground had been sown, I had no alternative left me. At the same time, I believe that an experiment of this nature, although made upon a crop raised in soil not peculiarly well adapted for its culture, will be quite as satisfactory in determining the advantages or disadvantages of it, as one made upon a more congenial soil. The soil consisted throughout the two acres upon which the potatoes had been sown, of a shallow loam, upon a bed of what is generally called till. The field had been well drained, but like every other field of the same nature of soil, (unless where Mr. Smith of Deanston's trenching plough may have been used,) continues in what may be called a cold, damp state, and therefore an enemy to the potato.

The variety of the potato sown was one which had been brought from Ireland some years ago by a gentleman of this neighborhood, and is called the red potato in this neighborhood.

I divided the whole field into parts of three drills each, and having explained what I wished to be done to a few children of from nine to twelve years old, previous to the appearance of any blossoms, they never allowed a day to elapse, without looking after their charge, and no sooner had a blossom begun to appear, (or in bud,) upon No. 1 of each part, than it was certain to be immediately plucked off. The other two drills of each part remained untouched until the blossoms upon No. 2 seemed to be fully expanded, when they were also plucked off, while No. 3 was allowed to ripen its fruit. By arranging the drills in this manner, I could depend on being more correct in having the soil of each of the drills of each part exactly similar than I could have been, had I divided the field in the manner proposed by the Society.

The preceding part of the experiment was (as it must appear to be) very simple indeed, and attended with no expense whatever, for there are always children in the neighborhood of a farm, who will do the work for a few pence a-day.

The most difficult part of the experiment to arrange was the taking up of the crop, so that there might be no interference between the different drills. To obtain this, I took three carts, one of which was appropriated entirely by No. 1 of each part, another by No. 2, and the remaining one by No. 3. In this manner I prevented the very slightest mingling of the potatoes.

The quantity of potatoes which each cart held, was exactly ascertained, and the management of this part of the experiment being given to one person, it was his business to mark down how many loads each cart took to the potato-pit.

After the whole crop had been taken off the field, and the overseer's note-book examined, the following was the result:

Drills, No. 1, being those from which the

blossoms were plucked in the bud, contained 30 bolls 2 bushels.

Drills, No. 2, being those from which the blossoms were plucked when in full flower, contained 27 bolls 3 bushels.

Drills, No. 3, being those upon which the fruit was allowed to ripen, contained 26 bolls.

The superiority, therefore, of No. 1 over No. 2, was 2 bolls 5 bushels; over No. 3, was 4 bolls 3 bushels; and of No. 2 over No. 3, was 1 boll 2 bushels.

From the above experiment it would appear, that the potato crop had been improved by having the blossoms plucked off, and that according to the period at which it had been done. At the same time, the difference is perhaps not much more than would be counter-balanced by the additional trouble given in taking up the crops; for, although regulated as well as possibly could be done, still it could not be taken up in nearly the time in which it would have been done, had the drills been resorted to indiscriminately.

The quality of the potato is remarkably good, it is of a mealy nature, and an uncommonly good keeper. We were using them last year here, in preference to early potatoes. Aberdona, Alloa, November, 1833.—[Transactions of the Highland Society of Scotland.]

TRANSPLANTING IMPLEMENTS.—Many farmers and gardeners prefer transplanting some field and garden crops, for various reasons, particularly on account of the greater certainty and yield of the crops. Turnips, which are so liable to be cut off by insects, and by turkeys, are, by transplanting, rendered as certain as most other field crops. In the New-England Farmer we find the subjoined notice of simple implements:

Several complicated transplanting instruments, consisting of several pieces, are described in the books, but I believe that one which I made and used last summer will be found to answer almost every purpose. It consists of a simple cylinder of tin plate, equal throughout, the top edge being turned over so as not to cut the hand. They may be made of any size, but the best for ordinary purposes are about 8 or 10 inches high, and 4 or 5 in diameter. It is placed over the young plant about to be removed, and pushed down a few inches into the soil, nearly or quite to the bottom of the roots; it is then taken up, bringing the earth and plant with it. Being then carried to the place where it is wished to set the plant, and the hole being previously made to receive it, it is set in the hole, and a few strokes from the digger on the outside loosens it, and leaves the plant erect in its place, with all the earth in a circular mass about it, when the transplanter is removed. The ease and neatness with which the operation is performed is very striking. A plant may be kept in the transplanter for several days uninjured, and carried to almost any distance. I have sent to Mr. Barrett three transplanters of different sizes, which will perhaps explain themselves better than my description.

WILLIAM OAKES.

Ipswich, April 8, 1834.

Since the above notice we have been introduced to another implement for the same purpose, invented by a Mr. Smith, and which is for sale at the Boston Agricultural Warehouse. This machine is so fitted with a moveable slanting side, that the communication between the plant and the earth in which it grew, except a portion of soil attached to the roots, is cut off at the bottom as well as the sides, by which means, on withdrawing the implement, the extraction of the plant, and a quantity of attached soil in which it grew, is rendered certain.

LOCUSTS.—According to the prevailing notion, these insects are to return this season, being the 17th year since their former appearance.

Manufacture of Silk—Gay and Bottum's Silk Apparatus. By the Editor.

Among the pleasing objects to be seen in the picture of our country, which is to be drawn some ten or fifteen years hence, will be the creeping and voracious silk worm,—pleasing, because the emblem of so much prosperity, and the source of so much earthly happiness. It will, in the language of the eye, say that the stony fields and the river bottoms of industrious New-England are inclosed by the bright-leaved mulberry—that the blooming fair in the land of steady habits are plucking the leafy food, feeding myriads of nature's humble and hungry offspring, and unwinding the glossy fibre that is to clothe and bring food to thousands and thousands of worthy families—that emulous New-York and Pennsylvania, and the youthful and vigorous West, are adding the important labors of the silk-worm to their already numerous and augmented resources,—and that the generous and high-minded South, seeing that industry and enterprise avail more than murmurings in averting the evils of the tariff, are introducing this and other abundant sources of wealth, for which their climate, soil, and internal resources afford many facilities.

From all we have seen and learned, we cannot resist the conclusion that this country will rapidly progress in the manufacture of silk until its own wants are supplied, and perhaps until it finds itself in a condition to compete with other countries to supply the markets of the world. In the northern, middle, western, and southern States, extensive preparations are being made, not only for the growth of the mulberry, but for manufacturing the silk, particularly in some of the New-England States. Of this progress our future pages will give an account.

Messrs. Gay & Bottum, of Lisbon, Ct., recently exhibited in this city their apparatus for the manufacture of this article. It was kept in active operation, and consisted of a reel for winding the silk from the cocoon, a winding frame for winding it from the hanks on to spools, or bobbins, a twisting or throwsting machine for doubling and twisting it on to other bobbins, and two looms for weaving. The whole apparatus would occupy a space of twenty feet square, and was made principally of iron, and in the most durable and finished manner. We took down a few notes, which we lay before our readers in the order they were taken.

The reel, which is on the principle of that of G. B. Smith, of Baltimore, consists of a wooden frame, and wheels of polished iron and brass. It is a very compact and simple machine, doing the work in the most perfect manner. The price of it is fifty dollars; and Mr. Gay thinks the part on which the silk is wound should be made of metal, to preserve the fibres or threads of the same tension until they become dry. This makes the thread smooth, and less liable to be fritted in the wear. If made of wood, he says the moisture of the silk will cause that part in contact with it to swell and shrink, and thus injure the thread. We should suppose, however, that glass, or thin pieces of metal fastened on the wood, would answer every purpose, and enable him to manufacture them at near one third the price.

On the supposition that the apparatus is moved with water or horse power, for which it is designed, one female will reel one pound

of raw silk for weaving, and one and a half or two pounds for sewing. For a hand reel, two females are required to do this quantity. One bushel of cocoons will make one and a quarter pounds of merchantable raw silk, and two ounces of floss silk.

The diameter of the winding part of Mr. Gay's reel is not sufficiently large. The larger it is the faster can the silk be reeled. One of these reels will reel for a whole neighborhood, and enable silk growers to produce raw silk that will command from \$4 to \$5.50 per pound.

The silk is taken from the reel and put on the winding frame, which winds, twists, and, if necessary, doubles the thread at the same operation. One female, on the above supposition that the apparatus is moved by other power, will wind and double two pounds from thirty bobbins in a day. This is for warp—a greater quantity for filling.

The spools are taken from the winding frame and put on the twisting or throwsting machine. One female will attend 30 to 50 spindles, producing about one and a half pounds of weaving silk, and two for sewing. After this operation the silk is cleaned by boiling in soap suds about two hours—20 lbs. of soap to 100 lbs. of silk. It is new colored, which is done in New-England principally with vegetable substances, almost entirely of the growth of this country. The silk is superior to that of foreign countries, in the durability of both color and wear. An elderly lady of Lisbon, Ct. has a piece of American silk of lead color, which has been lying about the house for more than twenty years; it is still unfaded and unchanged.

The next operation is weaving on a hand loom. A weaver, often a female, will produce per day five to six yards of thick vesting, or gros de Naples. Of thinner silks, six to ten yards can be woven. The specimens that we saw were very thick and strong, and were worth three dollars per yard.

Although silk has been manufactured in this country for more than fifty years, yet Mr. Bottum, who has given his attention to it for thirty years, informs us that there are not cocoons raised in the country sufficient to keep three hand looms in operation. If more cocoons were raised, there would be a better market, although they now command from three to three and a half dollars per bushel, of good quality. A farmer can raise one bushel for two dollars, if he hires all the labor. An orchard will let out for half or more of the cocoons produced. A gentleman in Hartford lets out his orchard for two-thirds. One acre of the white mulberry will produce forty pounds of raw silk. Dr. Henry Holmes, of Hartford, says from fifty to a hundred pounds. Mr. Butler, of New-York, calculates the new Chinese mulberry, *Morus multicaulis*, will produce one hundred pounds. Mr. B. has 100,000 of these plants.

When the cocoons are first finished by the worms, they are put in shallow baskets, covered with paper, and dried in an oven moderately heated. When taken from the oven the baskets should remain covered until the cocoons become cool, and then they are spread to dry. If they are not immediately spun, they should be put in cotton bags, with a little tobacco sprinkled among them to keep out moths.

Cocoons before they are wound should be sorted into three qualities: poor, or first sort, for sewing silk, will command \$4 per

pound; next, of fair quality, worth \$4.50; best, worth \$5 to \$5.50, when wound.

American raw silk thus prepared is superior to that of foreign countries, and will command a better price. Mr. Bottum has for two years past bought all American raw silk he could obtain. But on account of the scarcity of the article, he has been obliged to depend principally on imported silk to keep his weaving in operation. He depends on the females of our own country for all the operations except that of weaving; and for this cotton weavers will supply every demand. Much loss and much discouragement have been met with, by depending on foreigners. Mr. B. has used raw silk from Bengal, Canton, and Italy, and he prefers American silk, at 10 per cent higher price. It is brighter, softer, and stronger, by 25 per cent. The Italian is next best for softness.

The whole apparatus exhibited by Messrs. Gay & Bottum is principally made of iron, finished in a superior style, and cost about \$1000. The greater part of it would last for a century. They will exhibit it in New-Haven, on the 15th of May, before the members of the Legislature of Connecticut. They intend also to exhibit it at the Fair of the American Institute in this city, in October next. As soon as it can conveniently be made, a reel will be exhibited at the Agricultural Warehouse, 81 Barclay street. The improvements in the machinery are the result of eighteen years of experiment and experience. Independent of the weaving part, or looms, two hands are required for the moving power. Horse or other power will be requisite in producing work in factories.

STRAWBERRIES IN FLORIDA.—Strawberries were in the market at Tallahassee, Florida, in the month of March. New potatoes had also made their appearance.

THE FRENCH TREATY.—Some grave questions seem likely to arise from the rejection by the French Chamber of Deputies, of the appropriation to carry into effect their treaty of indemnity with us. Under it, French wines have been admitted for more than two years, we believe, into our ports at a reduced duty. Some duties, overcharged, have been refunded, and the whole course of this country has been shaped on the presumption that the treaty was valid, and of mutual obligation. The perfect good faith, therefore, with which we have acted in the matter, may be advantageously contrasted with—to say the least of it—the carelessness and indifference of the French Government, as instanced by suffering, in the first place, the bill drawn by the Treasury of the United States for the first instalment, to be protested—then by omitting to submit the treaty to the Chambers till a period so late, in the session previous to this, that no action could be had on it—and finally by failing, on the present occasion, to support this measure of obvious justice, and now of admitted obligation, with the same strength, which a few days before in carrying an odious law—that for suppressing associations—the Ministers exhibited. That law, in a house of 400, was carried by a ministerial vote of 246 to 154—whereas the ministerial vote for the treaty was only 168, a defection of seventy-eight members! The rejecting, or anti-ministerial vote, was 176. The whole number composing the Chamber of Deputies is 460, and yet on a question involving the mutual harmony and good understanding of two nations, 344 members only attended! This is a matter, which, under the circumstances, it will be difficult for the French ministry to explain satisfactorily.

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NEW-YORK AMERICAN.

MAY 2—MAY 10, 1834.

LITERARY NOTICES.

No. XXII.

Prairie du Chien, Upper Mississippi, Feb.

I had only been in Galena a few hours, when I learnt that a mail carrier was to start in the morning for Fort Crawford on the Upper Mississippi, and determined at once to accompany him, deferring an examination of the country around Galena till my return. It was about eleven o'clock of a fine, clear cold day, when my *compagnon de voyage*, a bluff, curly-pated fellow in a green blanket coat, drove up to the door in a better sleigh than I had seen on any of the stage routes below, and wrapping myself up in a couple of buffalo robes and sundry blankets, I found myself, after ascending the rugged bluffs of Fever river, armed at all points to encounter the biting wind which swept the open plain beyond. And here I may remark, that although the cold winds in this prairie country have a power that I had no idea of till I experienced it, yet the people dress so much more rationally than they do at the North on the seaboard, that health and even comfort are but little invaded. I remember when first overtaken by the cold weather on the prairies, I was travelling with a simple furled wrapper as an overcoat and a pair of carpet socks over my boots; the last of which, from their clumsy and effeminate appearance, I long neglected to put on. But on arriving one night at a lonely shanties, I found an old Indian trader just disencumbering himself of his travelling gear, and the lesson has not been readily forgotten. His disrobing reminded me of the grave-digger in Hamlet with his sixteen jackets, (a stale joke by the by, which is now rarely practised upon the stage)—and a man at arms of the fifteenth century, with his armour of plate and triple coat of twisted mail, was not cased in better proof than was my Indian trader. Among the articles of dress that I recollect were a blanket coat over an ordinary surcoat, a plaid cloak upon that, and a buffalo robe trumping the whole; while three pair of woollen socks, buckskin moccasins, and long boots of buffalo skin with the fur inside, assisted his leggings of green baize in keeping his extremities warm; and a huge hood and visor of fur set Jack Frost at defiance, should he assail from above. I do not by any means mention all these defences as constituting the ordinary apparel of the country; for every one on the frontier dresses just as he pleases, and whether he has his blankets and skins made up into coats and boots, or wears them loose about his person, no one comments upon it. The utmost freedom of dress prevails, and you may see the same person three days in succession with a leather hunting shirt, a surcoat of scarlet woolen, or a coat of superfine broadcloth, just from New York, all worn in any company, with the same air of independence; and, while several colors and textures frequently combine in the same dress, the result is, of course an outrageous violation of taste in individual instances, but great picturesqueness of costume upon the whole. The very figure whose apparel is most obnoxious to the laws of good taste as last enacted by fashion, being often that, which, of all others, a painter would introduce into a landscape to relieve its colors, or copy for some romantic charm of its own.

The country through which we now rode, though only interspersed here and there with woodland, presented a very different appearance from the open prairie below. In the vicinity of Galena it was much broken by rocky ravines and deep gullies—which in the spring of the year must afford a ready passage for the water created by the melting of large bodies of snow—and far away toward the Mississippi the inequalities of the surface showed like a distant range of mountains, that on nearer approach resolved themselves into three or four distinct hills, which again on reaching their banks, proved to be only rocky mounds, of not more than 150 or 200 feet elevation—standing isolated on the vast plain like excrescences, thrown up by some eruption from its surface. Beyond these again, the country became beautifully undulating, and when the warm light of sun-set glanced along the tall yellow grass which raised its tapering spires above the snowy surface, and the purple light of evening deepened in the scattered groves that rested on its bosom—it required no exercise of fancy to conceive that these were sloping lands, and smooth meadows, and open parks, which the gathering shades of night were stealing from the eye. But at last, just where the landscape was becoming almost too broken to keep up these associations

of high cultivation, a distant light appeared glimmering at the bottom of a rocky valley, and slipping and floundering through the snow which partially smoothed the rugged descent, we entered a small hamlet of log huts, and drove up to the door of a frame building, which proved to be the public house of "Mineral Point."

A portly Tennessean of some six feet received us warmly at the door, and hurried me into a room where a large fire of bur oak, and a smoking supper of venison and hot corn cakes were alike welcomed. Half a dozen miners in leather shirts and belted coats of Kentucky jean were lounging about the establishment, while a tall backwoodsman in a fringed hunting frock, was stretched on several chairs, with a pipe in one hand, and the other resting on a Pelham aovel, which, with a volume of Shakespeare, an old bible, and the "Western Songster," formed a pyramid beneath his brawny arm. "Whirling Thunder," the Winnebago Chief, had, as I was informed, just left the establishment, or our party would have been perfect. The old fellow, who, I presume, is superannuated, had been breathing revenge and slaughter against the Sacs and Foxes, who, he says, have killed a number of his tribe, and he avows a determination to come down upon the enemy with 700 warriors, though I believe it is well known that there are not at present 500 in his tribe, and they scattered far and wide on their hunting expeditions. As it was however, I found the company into which I was thrown, in more than one way agreeable. They were civil and intelligent; and when a sear was handed me by a well dressed gentleman engaged in the mines, who had set down to supper with us, I stretched my legs before the fire, and soon felt myself perfectly at home. The rumors of Indian wars, with the incidents in those already gone by being thoroughly discussed, feats of strength and activity were next introduced; whereat, a burly broad-shouldered fellow, with a head of hair like a boat's swab, jumped to his feet, and shaking the flaps of his rough kersey doublet like a pair of wings, he crowed and swore he could throw any man of his weight in the mines. "Why, Bill Armstrong," cried a little old man, who I was assured was 78 years of age, shaking the ashes from his pipe the while, "I could double up two such fellows as you in my time, and I think as it is (slowly rising and collaring the puissant Bill) I'll whip one of them now for a treat." They grappled at once, and Armstrong good naturedly allowing the old man to put him down, a laugh was raised at his expense. But Bill was too much a cock of the walk to mind it, and striding up to the bar, he called out, "Come here old fellow and take your treat—you're a steamboat—but who couldn't be beat by a fellow that had forty years the advantage of him."

The next day's sun found us, when a few hours high, in a country which, though not a house was to be seen for miles, I can only compare, with its intermingling of prairies and groves, rocky ravines and rapid brooks of sparkling water, to the appearance which the interior of the country along the Hudson would present, if the fences and farm houses were taken away. Its varied aspect was far more pleasing to my eye than the immense plains of table land below, where the sound of a waterfall is never to be heard, and a stone larger than a pebble is, (unless on the banks of the Illinois,) rarely met with. The soil, indeed, is not so rich, but the country is unquestionably more healthy; and though the climate is actually more severe in winter, yet the wind is so much broken by the numerous groves, and the general inequalities of the surface that one suffers much less from cold. A great error is committed by Government in keeping the land out of market, for the patches of woodland, though frequent, are not so dense as those below, and the number of smelting furnaces of lead ore, which are scattered over the whole country between Rock river and the Wisconsin, tends to diminish them so rapidly, that in a dozen years hence, wood enough will hardly be left for the ordinary purposes of the farmer. Whatever measures are adopted, however—and I believe there is a bill in relation to these lands, now pending in Congress—the pre-emption rights of the first settlers should be secured in the most liberal manner. Their sufferings from three Indian wars, and their endurance of every risk and privation, are almost incredible; and considering that it will take them some years now, to recover from the last affair of Black Hawk, I would have government give them several years credit; but the early sale of the lands, I believe to be indispensable to the future welfare of one of the finest regions in the world. The truth is, that no smelting should be done in the interior, but the mineral should be transported to points

where fuel is more abundant, and the timber now growing upon the spot left for the use of the farmers and the miners, to whom it is indispensable for the prosecution of their labors. Such will hardly be the case until a property in lands is established, and individuals be no longer permitted to sweep grove after grove from the soil, till the country begins to assimilate in some places to those leafless tracks in Illinois, which will probably remain unsettled prairie for a century to come.

I was particularly struck with the bold life which these miners have long led, the chief dangers of which, it is presumed, are now over—by observing a strong block house erected among a cluster of small shanties where two brothers lived with whom we stopped to take some refreshment at noon. They were miners and farmers together; and carrying on their business remote from any other house or settlement, they probably sent the mineral and vegetable productions of their favored soil to market at Galena in the same car. They had struck the vein of ore which they were working in badger hunting—the habits of that animal being of great assistance to the miner in exploring for mineral. I saw at the same place a fine dog terribly goaded by a wild boar—the descendant of the domestic hog, which runs wild in this region, and sometimes makes a good hunt.

Our rout hither, which was by no means direct, carried us through a broken savage country, where a thousand clear streams seemed to have their birth among the rocks—singing away—though the earth was wrapped

"In safe-consuming winter's drizzled snow."

as if the leaves of June quivered over their chrysal currents. At one time these crisped fountains were the only objects that gave life to a burned forest through which we rode, where the tall branchless and charred trees stood motionless on the steep hill-side, or lay in wild disorder, as they had tumbled from the rocky heights, into a ravine below. Emerging from this desolate region, where the tracks of bears and other wild animals were to be seen on every side, we launched out on one of the loveliest prairies I ever beheld. It was about a mile wide, and not more than four or five in length, and smooth as a billiard table, with two small islets of wood in the centre. Our horses, which had seemed almost fagged out while slipping and stumbling among the rocks and fallen trees, in the timbered land—now pricked up their ears and snorted with animation, as they made our light sleigh skim over the smooth plain.

It was afternoon on the third day after leaving Galena, that on descending a steep bluff of about 150 feet, we came to a small tributary of the Wisconsin, winding through a narrow valley below. Following down the slender rill, whose banks exhibited no shrubbery, save a few dwarf willows, we crossed a wooded bottom, where the long grass among the trees shot above the snow to the height of our horses shoulders, and reached at last the Wisconsin, where the stream might be about a quarter of a mile wide. After trying the ice in several places with long poles, we ventured at last to cross; and scaling a bold bluff at the opposite side, paused a moment at a stone house, owned by a Frenchman, to let our horses blow. A band of Winnebagoes were standing at the door, and as they were all in mourning for some recently deceased relations, their broad blunt features, blackened as they were, made them look like Hottentots. A ride of six miles, through a high rolling prairie, interspersed with massive groves of oak, brought us at last in view of the bluffs of the upper Mississippi, rising in rocky masses to the height of 4 or 500 feet above the bed of that beautiful river, whose iron bound banks and gentle crystalline current, bear but little affinity to the marshy shores and turbid tide which are distinguished by the same name, after the Missouri gives a new character to its waters. Never shall I forget the first view of "The Father of Rivers," as a reach of several miles shut in, partly by its own bluffs, and partly by those of the Wisconsin, with its numerous islets, smiling in the light of the setting sun, looked like some comely lake of the West: girdled, apparently, by inaccessible cliffs on three sides, and keeping the edge of a broad meadow—which in its turn was bound and sheltered by lofty bluffs—on the fourth. That meadow lay now beneath me, and it was Prairie Du Chien. II.

SERMONS ON DUTIES BELONGING TO SOME OF THE CONDITIONS AND RELATIONS OF PRIVATE LIFE; by JOHN G. PALFREY, A.M., Professor of Biblical Literature in the University of Cambridge. 1 vol. 8vo. pp. 370. Boston: CHAS. BOWEN.—We like both the tone and the subjects of these sermons. They are

practical. They come home to the business and bosoms of all. They are catholic, too, in their sentiments, and embrace all: they are free from controversial points; and finally, they seek not to explain, what finite understandings can neither comprehend nor elucidate, but leave to faith what belongs exclusively to the domain of faith.

These Sermons treat of the duties and obligations of social life, and were delivered some years ago to the congregation in Brattle Square, of which the Rev. Professor was then the Pastor. They discuss the duties of the young and the old, of the rich and of the poor, of married life, and of the parental and filial relations. The style is clear, forcible, and polished, and the doctrines such as may be read without offence by all, and by many surely with profit. The book, too, is printed with the usual beauty and accuracy of the Boston press. We make an extract from Sermon X, on "the Duties of the Rich," as exhibiting fairly the manner of the writer:

It is well for us all, my friends to have cares.—There is no one indeed who has them not, if he is disposed to see them; but for any one who is not so disposed, it is happy if there are those which will force themselves upon his attention. For serious cares of any kind make the mind serious, which so far is a great good. Without them it becomes light and giddy. There are persons, who constitutionally seem almost incapable of being led, in the wantonness of their prosperity, to do or wish ill to any human being; whose feelings towards others appear all to be feelings of a superficial, indeed, but as far as it goes, a genuine kindness; but for whom we see, that the wish which a true friendship would dictate, would be that they should have some of those 'changes,' for want of which they fear not God. They are the spoiled children of prosperity. There is nothing substantial in their character. There is nothing deep in any of their feelings. The business of their lives is a weak and capricious self-indulgence. The scriptures, which subject the human character to so rigid an analysis, are faithful in exposing this tendency. 'He gave them their request, and sent leanness into their souls.' What a just as well as strong picture this, of the condition, in which a luxuriance of outward blessings is contrasted with that dearth of all that is best in the mind and heart, with which we sometimes see it followed.—'The prosperity of fools shall destroy them.' How many the instances in which this sentence has been executed; in which minds not absolutely ill disposed, nor incapable under other circumstances of blessing and being blessed, have been intoxicated and made merely giddy and frivolous by too much good fortune, as we call it, and seduced away from every strenuous and honorable application of their powers.—'In my prosperity I said, I shall never be moved.' How natural a boast for a mind inflated by abundance, and by the deference which it brings, and by the habit of seeing its own will a law; yet a boast how presumptuous, an expectation how fallacious, a confidence how sadly ill-adapted to prepare for the changes which time may bring. The very waywardness and eccentric humors, which such a feeling generates, are the occasion of more wants than any prosperity can supply; and the affluent circumstances, which to others seem adequate to obviate every wish, are but experienced by the possessor to increase their number. The feeling is as much at war with the spirit of self discipline and improvement, as with that of content. 'Be not high-minded, but fear,' says the apostle, using the self same expression with that in our text, and conveying a lesson the most needful to be observed by all who are intent on growth in grace. But how little consistent with this humble and sanctifying spirit of self distrust is that vain elation of the mind which we are now considering. And what a stubborn and impracticable religious insensibility does it threaten to create. 'When thou shalt have eaten and be full, then beware lest thou forget the Lord.' This is an admonition, called for by well ascertained tendencies of human nature.—Jeshurun, when pampered, was restive and untractable; then he forsook God who made him, and lightly esteemed the rock of his salvation. 'They were filled and their heart was exalted, therefore have they forgotten me.' This is the history of many an envied, but unhappy man's experience; and if it would be going too far to infer that this kind of prosperity is therefore not to be desired, we needs must own that it is not every mind which has the strength to bear it.

THE LIFE OF THOMAS EDDY—comprising an extensive correspondence—by SAMUEL L. KNAPP—1 vol. 8mo—pp 400—N. Y.—CONNOR & COOK.

In a life, however long, devoted to acts of benevolence and to the improvement of the institutions of charity, of education, of punishment and of reform—there can hardly be found, or indeed expected, any of those stirring incidents which impart a zest to the biographies of men more ostensible on the stage of human affairs. It was therefore not without surprise that, on opening this volume, we found ourselves gradually carried on from page to page, till our interest became thoroughly excited in the modest records of this good man's life. The correspondence with Colquhoun, the famous police magistrate of London, and with other foreigners, well known in the annals of philanthropy, as well as with many distinguished men in our own country, gives both variety and interest to the narrative—which, as a whole, does credit to the taste and feeling of the author.

AIDS TO MENTAL DEVELOPMENT, or hints to parents with an address to Mothers, by a Lady of Philadelphia. 1 vol. 12mo. pp. 340. Philadelphia: Key & Riddle.—This is a reprint, with some modifications, to adapt it to our use, of an English book. The design is good, and we think generally well executed, though liable to the objection of making the children, who are interlocutors in the dialogue, talk too cleverly. This is of bad practical tendency, as discouraging many from persevering in the plans here recommended and illustrated, by ascertaining that their children fall so far short in the nature of their answers, and in quickness of comprehension, of those in the book.

The address to mothers, by the Philadelphia lady, embodies some excellent views on education, and on the importance especially of that education of which home is the only school.

THE CLASSICAL FAMILY LIBRARY, Vols. XI and XII. New York: HARPER & BROTHERS.—These two volumes in continuation of the Classical Library, furnish us with Virgil's Poems, the Eclogues translated by Wrangham, the Georgics by Sotheby, and the Æneid by Dryden. The dedication of Dryden's translation to Lord Normanby is also given, and it is, as is well known, an admirable critique on the Æneid.

Praise or extracts for such works as these would be misplaced.

AN ESSAY ON NEW TRIALS by DAVID GRAHAM Counsellor at law.—1 vol. 8mo—N. Y.—HALSTEAD & VOORHIES.

We can to-day only acknowledge the receipt of this well printed volume, treating a very important branch of law. We hope next Saturday to be able to speak of it, from careful examination.

CITY OF NEW YORK.—NEW YORK AND ITS VICINITY.—These are two very well executed little maps, colored, folded up and bound in morocco—so as to be conveniently put in the pocket and carried about.—The maps are executed by D. H. Burr, and are published by J. DIST RUN L.

THE NATIONAL PORTRAIT GALLERY, Part XI., by JAS. HERRING, of New York, and JAS. B. LONGACRE, of Philadelphia; N. York, MONSON BANCROFT.—This number presents us with engravings and biographies of Col. AARON OGDEN of New Jersey, of JAMES FENIMORE COOPER, also a Jerseyman, as we find, though we had always before supposed him a native of this State, and of the Rev. TIMOTHY DWIGHT, of Connecticut. It is an excellent number, both in the execution of the engravings and the biographical sketches—the latter of which, though prone, as is the nature of such notices, especially when applied to living men, to exaggerated estimates of merit, are quite interesting.

COMPANION TO THE NEWSPAPER; London and New York, at Wm. JACKSON'S, 71 Maiden lane.—This is

a capital publication. It is a sort of catalogue raisonné of the principal matters contained in a London weekly newspaper of great circulation and ability, the Spectator,—and furnishes in a quarto volume of some 220 pages, materials of information, convenient for consultation or history, of the greatest accessibility. Every public library at least, and private libraries of any extent, should take a copy of this publication, which is to be continued annually.

Among the items of great interest in this volume for 1833, are the history of, and discussions concerning, the East India charter, the Bank of England, reform in the law of real property, with a general retrospect of public events, &c.

AN ACCOUNT OF JANE C. RIDER, the Springfield Sonambulist, by L. W. BELDEN, M. D.—Springfield: G. & C. MERRIAM.—When we first heard the extraordinary stories concerning the subject of this memoir, we were certainly among the incredulous. We have now read with care and with interest, this account by Dr. Belden—the physician who saw her in her first paroxysm, and followed up the case till a cure was effected—and we can no longer refuse our faith to the truth of the facts related, nor our conviction that—however inexplicable and unexplained, as many of them still seem to us—there was neither imposture on the part of the girl, nor collusion on the part of those around her.

The great distinction in the case of this young person from other extraordinary cases of somnambulism on record, was an incredible power of vision; and, ingenious as we think Dr. Belden's attempt to explain this power, as the result of a diseased and thereby highly excited state of both the eye and brain, we are not satisfied with it. The idea that any conceivable increase of the sensibility of the retina, accompanied by any morbid change that can be imagined of the brain whereby its perceptive powers should be excited to the utmost, can explain the fact of this girl's reading in a darkened room through thick bandages wadded with cotton and placed over her eye lids—the names of strangers so faintly written in pencil, or in such small letters, as to be scarcely legible to persons with all their faculties awake—seems as contrary to the ordinary course of things—as the very fact, which it is meant to explain. We have nothing better, indeed, to offer in the way of solving the difficulty; and must, therefore, be content to believe—by reason of the unimpeachable evidence in the case—and to marvel.

LIFE OF M A-KA-TAI-NE-NA-KIA-KIAK, OR BLACK HAWK; with an Account of the Cause and General History of the late Indian War, dictated by himself. 1 vol. Boston: RUSSELL, ORIDRNE & METCALY.—This is the first specimen, we believe, known to our literature, of a savage's auto-biography. It was dictated by Black Hawk, after his tour in the United States, to Antoine Leclair, the United States Interpreter to the Sacs and Foxes, who vouches for the care and fidelity with which it is rendered into English. It is dedicated by Black Hawk in the Sac tongue, to General Atkinson, his conqueror. It refers the cause of the hostility of the Sacs against the Americans, to the fact of treaties surreptitiously made by them, with unauthorized agents of the Sac nation, which, when attempted to be carried into effect, were felt as grievous wrongs and outrages. We do not doubt if there were historians among the Indians, that such or similar would be the origin of most, if not of all, of what are called Indian wars, but which are, in fact, more predatory excursions to seize by force, the lands we covet and do not own.

The following notice of some of the most interesting points in this history we take from the New England Magazine, for this month:—Behold Black Hawk, then a general, in the British service, and a more respectable one than Sir Hudson Lowe. Fire-arms, ammunition, tomahawks, and clothing, were distributed, and General Black Hawk

started on the next morning, with five hundred braves, to join the allied army, below Detroit.—There was, soon after, a fight, in which, says the general, "the Americans fought well, and drove us with considerable loss. I was surprised at this, as I had been told that they would not fight." The same success followed the attack of a fort, and Black Hawk became tired of his new service,—"the success being so bad, and having got no plunder." He remarks, that "the Americans shot better than the British, but are not so well provided for." In fact, our friend Bull always fights best with a belly full; but a Yankee is more pugnacious when hungry. Having left the service, Black Hawk "humiliated himself before the Great Spirit, and returned thanks for preservation through the war." He was never ferocious, and he has recorded, that he often spared the unwarned and helpless. When on an excursion against the whites, to avenge the death of his adopted son, he spared those he came to kill.—"We had not proceeded far, before we met the man whom we supposed we had killed, as he was scalped, staggering like a drunkard, all covered with blood. This was the most terrible sight I had ever seen. I told my comrade to kill him, to put him out of misery,—I could not look at him. I heard a rustling in the bushes, and distinctly saw two little boys concealing themselves. I thought of my own children, and passed on without noticing them."

Black Hawk was ever a good dreamer. The Great Spirit, in a dream, gave him particular directions where to find a large snake, viz: down the bluff, at a creek, in the top of a hollow tree that had been cut down. The snake was to point out with his head, the direction of an enemy. These were two American officers.

At a conference with American agents at St. Louis, Black Hawk and other chiefs, replied to the Commissioners, that "what they had said was a lie," and he seems to have been surprised that such a form of speech should excite resentment. "Here," said he, "for the first time I touched goose-quill to paper, not knowing, however, that by that act I consented to give away my village." Jack Cade was similarly taken in. "Some say," said he, "that it is the bee that stings; but I say it is the bee's wax; for I did but seal a bit of paper, and have not been my own man since."

The loss of two children brought much sorrow upon Black Hawk. He built a secluded hut and reduced himself to poverty. He blacked his face for two years; drank water in the middle of the day, and ate a little boiled corn at sunset. This he did hoping the Great Spirit would take pity on him; and, said he, "I never take a drink of water from a spring without being mindful of his goodness."

But the treaty was to be executed, and the Indians were called upon to leave their village. As the chiefs did not admit that they had knowingly sold it, there was a difficulty in getting them away. Besides, said Black Hawk, "my reason teaches me that land cannot be sold; nothing can be sold but such things as can be carried away." He was the "Village Hampden," and resisted all encroachments on his field. He resolved not to quit, and the Prophet assured him that he would not be removed. General Gaines, however, defeated the prediction, and Black Hawk "touched the goose-quill" to another treaty, and crossed the Mississippi.

But Black Hawk and the Prophet were making ready for war, and the "White Beaver" (General Atkinson) received a message, "If you wish to fight us, you may come on." The events of the war have been detailed in the newspapers. Pressed on all sides, vanquished but not humiliated, he gave himself up to his enemy like Weathersford, Themistocles, and Napoleon. He was carried to Washington, and visited other cities. He was astonished at the good trail which he found for his carriage—meaning the Cumberland road: he saw many wigwams and villages, but could see nothing in the country to induce the people to live in it. The Railroad was yet more astonishing, though Black Hawk preferred to travel on horseback.

The Great Father at Washington he supposed has seen as many winters as himself. "His wigwam is well furnished with every thing good and pretty." At Washington, Black Hawk was well received by the people; and especially, as he says, by the squaws.

He was surprised at the size of Baltimore, and of the "big village where they make medals and money." A New York, to his utter astonishment, he saw a man ascend in a balloon till he was no longer visible: one of his young men asked if he was going to see the Great Spirit. "Every body," said he, "treated us with friendship. The squaws made us many handsome little presents. They were very kind, very good, and very pretty—for pale faces."

The publisher of the American edition of the "Foreign Quarterly" and "Westminster" Reviews, has given notice that the republication will be discontinued. The reasons assigned are the dissatisfaction produced throughout [the] Southern States [at the course of the Westminster Review during the last three quarters of 1833, on the subject of domestic slavery in this country, and the general pressure of the times, which have produced a great falling off in the circulation.

The intelligent correspondent of the New York American, who is now travelling in the far West, continues his interesting letters. We renew the hope, expressed some time ago, that these letters may be collected and preserved in a volume. They furnish more fresh and graphic sketches of Western scenery, and better illustrations of Western manners, than we remember ever to have seen any where else.

We may now say, we believe, with some confidence, that the desire repeated in the above paragraph from the Alexandria Phoenix, and which we may add has been manifested in various quarters, for the publication in a book, of the letters from the West of our correspondent H, will be complied with.

They will, it is expected, when completed, constitute a handsome volume, comprising much information in detail, statistics, prices of land, produce, &c., which was not deemed as well suited to the columns of a newspaper.

We have several letters now on hand, which lose nothing of their interest or freshness as they increase in number.

FOREIGN INTELLIGENCE.

LATE FROM EUROPE.—The ship *Victoria*, from Liverpool, brings us London papers to the 3d ult. inclusive, and Liverpool papers of the 4th. The accounts are not particularly interesting, and therefore, as we are much pressed for room, we do not make many extracts. Sir Thomas Denman has been made a Peer.

FRANCE.—The Ministers have succeeded in carrying their law on the subject of associations, nearly in the state in which they first proposed it.—all the amendments at all calculated either to modify its oppressive character or even to limit its duration having been rejected by large majorities. At the final debate, which took place on the 25th ult., M. Page spoke strongly against the measure, and in the course of his speech made the following solemn protest against it:

"If (said the Hon. Deputy) a Frenchman, an honorable man, wishes to form a union to propagate, strengthen, or preserve Christianity—I am his man, in spite of your Ministers and your law.

"If a Frenchman, an honorable man, wishes to form a union, to extend charity and assistance to the poor and laboring classes, to the sick, or to the workmen out of employ—I am his man in spite of your Ministers and your law.

"If any Frenchman, an honorable man, wishes more extensively to diffuse acquired truth, sound doctrines, and the knowledge which appears for the morality of the future and the happiness of mankind—I am the man, in spite of your Ministers and your law.

"If any Frenchman, an honorable man, wishes to secure to his country the safeguard of electoral independence, and oppose those disgraceful elections, which deliver political venality up to Ministerial corruption—I will be with him, in spite of your Ministers and your law.

"The slave of all just laws, the enemy of all unjust laws, between the prosecutors and their victims I will not hesitate. I know no human power which can make me apostatize from God, humanity and France. I will disobey your law, to obey my conscience."

On the division, the numbers were for the bill, 246,—against it 154,—majority 92. Several of the societies in the provinces have already protested against the law, and announced their determination to disobey it. Some of the most distinguished members of the *Société des droits de l'homme* have deemed it expedient to quit Paris. The veteran patriot, Lafayette, has delivered the following written protest against the measure:

"The new and progressive attack on our July re-

volution has been so completely manifested on both sides in the debates that my forced absence from the Chamber is a subject of regret for myself alone. I could, nevertheless, have certified to the heirs of 89 and 1830 that, even under the ancient regime, such an interdiction, subject to the good pleasure of the police of Sartines and Lenoir, would have excited astonishment and indignation, even in the Saloons of Versailles. I now confine myself to adding my personal protest to the numerous votes of my honorable colleagues against this anti-social consequence of a system, the origin and tendency of which I pointed out long ago. "Paris, 26th March, 1834.

(Signed) "LAFAYETTE."

The *Tribune* has the following:—The *Union de Juillet* held a general meeting yesterday, under the presidency of General Lafayette, when they entered a protest against the Associations' Bill, and pledged themselves not to submit to it! Without making public things which concern the society alone, we say that more than one deputy was present at the meeting, and that M. Lafitte was not the least energetic in recommending resistance."

SPAIN.

BAYONNE, March 25.—Quesada has at last received instructions to commence operations, and this evening we learn that his division is already on its march, but the insurgents, as soon as they got intimation of it, immediately put themselves in motion, and are proceeding towards our frontiers. At Elisondo the municipal authorities were seized with panic, as well as the workmen who were making uniforms for the Carlists, who all took flight towards Balcarlos, and spread alarm throughout the country. Numerous persons are emigrating from the country, and the place is full of persons who have fled thither, conceiving themselves in danger by the proclamation of Quesada.

The following is an extract of the *Boletín de Comercio*, respecting the convocation of the Cortes, and which it states, is obtained from quarters which are usually well informed—

There will be two Chambers, one styled 'Procuradores del Reyno,' (Peers of the realm) and the other, 'Procuradores del Reyno' (Deputies of the kingdom).—The Chamber of Peers will be composed of the Archbishops and Grandes of Spain and Castile, Generals who have distinguished themselves, Magistrates, Landed Proprietors, Principals of Manufactories and Commercial Establishments, Directors of Public Instruction, and those who have rendered service to the country. The sittings will be public, and the dignity of the Peerage conferred for life. The Chamber of Deputies will be composed of persons freely elected, who have an income of 12,000 reals, and have attained the age of 30.

Government servants, lawyers, physicians, clerks of the supreme tribunal, and surgeons, may be elected Deputies, when possessing only half the above mentioned income.

Every elector must be possessed of an income of 6000 reals. The population of the places will be the basis on which the number of members to be returned will be decided, who will be elected for three years. The Cortes will vote the taxes. The King will have the power of convoking, provoking, and dissolving the Cortes; but he must convoke another for at least a year. At the death of the King the Cortes will assemble, that the heir to the throne may swear to protect the laws. The Cortes will also meet on any extraordinary occasion.

The Indicator of Bordeaux of the 27th inst. has the following of the 25th from Bayonne:—"The faction of Biscay is entirely dispersed, but the vexations of the inhuman Zabala are not at an end. It is said that Gen. Espartaco, in consequence of arrests made by Zabala at Logneitio, has taken several of the Carlist inhabitants of the same town as hostages. In consequence of the entry of the insurgents in to Vittoria, the Queen's troops made 52 prisoners, including 7 officers, who were shot, as well as a man who fired at a conscript from his window, by order of Gen. Ossa." It has the following from Madrid, dated the 19th inst:—"By a Royal decree, the Queen has named Patriarch of the Indies Don Manuel Frayle, Bishop of Sigüenza. By another decree Don Jose Maria Manesca has been named President of the Royal Court at Madrid. Don Pedro Vellei is named Corregidor of Madrid. Major-General Miguel Tacon has been appointed a Lt General, and Capt. General of the Isle of Cuba."

It is said the King of Holland has refused the pardon for which POLAKI prayed in his petition; or to grant any mitigation of the sentence pronounced on him for stealing the Princess of Orange's jewels.—[Times.]

By the packet ship United States, Capt. Hordredge, from Liverpool, we have Liverpool papers of the 8th, and London of the 7th April. It will be seen that a new French Ministry has been formed.

[From *Bell's Weekly Messenger*, April 6.]

The foreign intelligence of the week, so far as it relates to France, is not without interest. The American Indemnity Bill was rejected in the Chamber of Deputies on Wednesday by a majority of 176 to 168. Two of the Ministers, the Duke de Broglie and General Sebastiani, spoke at great length and with much vehemence in its support, and all the Ministers voted for it. But it was rejected by a majority of eight in a very full Chamber, much, very much, to their credit.

The Duke de Broglie and General Sebastiani immediately tendered their resignations. M. Guizot shortly after followed their example, and it was expected that M. Humann, the Minister of Finance, would also resign. The Cabinet is thus broken up. An attempt will be made to induce the Duke de Broglie to remain, but it is supposed that it will not be successful.

The consequences of the change of ministry in France at the present moment, says an able contemporary, may be of the utmost importance. It will be clearly impossible to carry the associations' law into effect by a divided and feeble administration, in the present temper of France, especially on the eve of a general election. Who are to be the successors of the resigned ministers is not yet fixed.

[From the *London Times*, of 7th April.]

We have waited with some anxiety, or at least with much interest, to learn the new cast of the French Ministry, the completion of which appears in the *Moniteur* of Saturday.

It was scarcely possible to conceive that the Duke de Broglie could resume his portfolio; after his resignation of office had been recorded in the *Moniteur*, and in the face of a vote of the Chamber of Deputies, which, though perhaps now repented of, could not be reversed. But it is not easy to imagine how he alone should have been expected to resign, since the treaty which he defended so ably in the Chamber was made in the time of his predecessor, and must have had the sanction of the whole of his colleagues, as well as his own. However that may be, his place is not yet adequately filled, and cannot perhaps be so worthily occupied by any French candidate for the Foreign office.

If, however, the French public has to regret the change in the Foreign Department, which has deprived them of the zeal and talents of de Broglie, some of the other appointments in the new Cabinet will appear still more objectionable. If there be one man in France more unpopular than the late Minister of Justice, Barthie, it is M. Persil, who is nominated his successor. The continued assaults of the latter upon the press, and the desire which he has shown to alter the constitution of juries, will make his appointment appear the result of a contempt for public opinion, rather than a compliance with the dictates of a moderate policy. The transference of M. Thiers from the Board of Trade to the Ministry of the Interior is an event of no consequence; but surely M. D'Argout must have thought himself the victim of an intrigue in being obliged to exchange the honors and emoluments of the Minister for the place of the President to a banking establishment.

We quote the abstract of the new appointments from the *Moniteur*, premising that the modifications of the Cabinet are said by the French journals of Saturday not to have been completed till Friday evening. The official journal promulgates Royal ordinances, by which M. Persil, Deputy, Procureur General of the Royal Court, is appointed Keeper of the Seals, and Minister of Justice and of Worship, in the room of M. Barthie, who is created a Peer of France, and made First President of the Court of Accounts, in the room of M. Barbe Marbois, who resigns, but who is invested with the dignity of Honorary First President of the Court of Accounts.

M. Thiers, Deputy, Minister of Commerce and Public Works, is appointed Minister of the Interior in the room of Count D'Argout, who is made Governor of the Bank of France in the place of the Duke de Gaete.

M. Duchatel, Deputy, is nominated Minister of Commerce in the room of M. Thiers.

The separation of the attributions of the Ministers of the Interior and of Commerce will be hereafter determined by a special ordinance.

Vice-Admiral Count de Rigny, Deputy, and Minister of the Marine and Colonies, is appointed Min-

ister of Foreign Affairs in the room of the Duke de Broglie.

Vice-Admiral Baron Roussin, Ambassador at Constantinople, is named Minister of the Marine in the room of Admiral de Rigny, who, however, will continue to exercise the functions of his late office till the arrival of Admiral Roussin.

M. Martin du Nord, Deputy, and Advocate General of the Court of Cassation, is appointed Procureur General of the Royal Court in the room of M. Persil.

It will be seen, therefore, that the Ministers who retain their previous offices are Marshal Soult, President of the Council and Minister of War; M. Humann, Minister of Finance; and M. Guizot, Minister of Public Instruction.

"The Sultan has," says the *London Spectator* of 29th March, "replied to Lord Ponsonby's interrogations respecting his famous treaty with Russia, in the most firm and haughty tone. He has made up his mind to keep his engagements with the Czar, in spite of the hatred which his subjects bear to the Russian alliance. The *Times* correspondent at the Porte says—

"The Russian fleet, with 25,000 men on board, is waiting at Sebastopol for sailing orders: considerable bodies of troops are advancing in the direction of the Danube; and by a late ukase, the 60,000 men raised in Moldavia and Wallachia have, though Turkish subjects, been incorporated in the Russian army."

"Excepting Lord Palmerston, no one, we imagine, places any confidence in the pacific professions of Russia. These warlike preparations give the lie to all such palaver."

A letter from Constantinople, dated the 4th ult., the statements in which, if founded in truth, seem greatly exaggerated, has the following: "It is certain that the steam packet which recently conveyed Halil Pacha to the Dardanelles had a detachment of artillerymen on board; it is also certain that the fleet and Turkish army are recruiting with extraordinary activity, and that Russia has just levied troops in Moldavia and Wallachia. By what right? All that we know is, that the Russian fleet stationed in the port of Sebastopol is ready to set sail, at the first signal, for Constantinople; that Nicholas has sent to Achmet Pacha 1,000,000 of ducats, proceeding from the debt of Turkey to Russia; that he has granted the Sultan eight years to pay off his debt; that a serious revolt, the instigators of which are unknown, had broken out in Bagdad, and in Kurdistan, and that the Porte has been obliged to send an imposing force there; that Constantinople is in a deplorable condition; that its trade has never been so slack; that nothing but a miracle can save the Ottoman Empire, and unfortunately the times for miracles are past."

The Augsburg Gazette of the 1st inst. has the following, of the 26th ult., from Vienna:—"It is thought that the Congress will hold a grand sitting this week, which will be attended by M. Ancillon. Resolutions will then be agreed to, sufficient of themselves to contradict the injurious reports sent abroad by the French journals relative to the intentions of the Germanic Governments, and to the debates of the Congress."

The Madrid Gazette of March 27, announces that a Plymouth vessel, called the Express Packet, laden with 2,500 muskets, 200 barrels of cartridges, 180 barrels of gunpowder, and other warlike stores for Don Carlos, has been captured in Vigo Bay by the Government Guardacosta brig the Argus. The same Gazette contains two decrees, signed on the 26th, at Aranjuez, one of which orders the seizure of the temporal property of all the ecclesiastics who have quitted, or may quit, their churches to join the rebels; and the other commands the suppression of all convents the members of which shall have mixed themselves up with the plots of the Carlists, either by joining the insurgents, concealing ammunition or warlike stores, or assembling clandestine Juntas.

PORTUGAL, Oporto, MARCH 24, four o'clock p.m.—The governor of the city has just received a despatch of four lines from Admiral Napier, who says—"This morning I took Camina by surprise, and Viana will be shortly in our possession." The Admiral landed there with about 500 men, brought from Lisbon in the steamers *George the Fourth* and *Lord of the Isles* and mastered the place (where the feeling is strongly in favor of the constitutional cause) without opposition.—[*Times*.]

Before the arrival of M. de Sarmiento it was resolved, as I advised you at the time, to pass the Portuguese frontier in considerable force, for the purpose of

protecting the frontier provinces from the menaces of Don Carlos and his ally of the House of Braganza. Instead of a mere inroad however, in quest of a fugitive pretender, the troops of the Queen of Spain, whether with or without a formal declaration of war, will assume an attitude directly hostile to one branch of the House of Braganza, and will act of course in perfect accordance with the views of the other. This was one of the leading objects of the mission of M. de Sarmiento to Madrid, and it will not be completed to the satisfaction of men of liberal principles in either of the two kingdoms, until the whole peninsula is united in action, as it is already in interest, by the conclusion and ratification of a treaty of alliance offensive and defensive.

NAPLES, March 15.—The union of Prince Leopold, Viceroy of Sicily, and second brother of the King, with the Princess Mary, daughter of the King of the French, is no longer a matter of doubt: the marriage is to be celebrated in the course of this spring. Much hope is placed in the alliance, the young Princess having been educated under the immediate eye of Madame Adelaide, whose cultivated understanding and richly endowed mind are well known. In Palermo, which is to be the residence of the Royal pair, the news has created the liveliest sensation, the young Princess having been born there. It is said that the Queen of the French will accompany her daughter here; at a later period the Dukes of Orleans and Nemours will also pay us a visit. This has given rise to a report that our Sovereign had changed his opinion relative to his sister, the Queen Regent of Spain. Interesting discoveries have been made at Torre del Annunziato; it is not yet known whether the temple being now cleared there, forms part of a grand Roman villa, or whether it be the commencement of a third buried city, like Herculaneum and Pompeii. Communication is now opened with Greece. Vesuvius is sending forth slight eruptions. The *Gazette* quotes the funds at Vienna, on the 22d inst.—Metallics, Five per cents., 98 1-16; Ditto, Four per cents., 88 7-16; Bank Actions, 1,248.—[*Angsburg Gazette*.]

The Frankfurt Gazette of the 29th ult. announces the death of the reigning Duke of Anhalt Bernburg, father of the Princess Frederick of Prussia.

Recent accounts from Napoli di Romania announce the death of the Greek Captain Colocotroni, in the prison in which he had been confined several months; for having taken part with several other Chiefs in a conspiracy against the Government.

CASPER HAUSER—whose mysterious story and recent death by violence, caused so much interest, would appear by the annexed paragraph, to have entailed destruction too upon his friend, patron, and biographer, the Jurist Fuerback.

According to the Hanoverian paper, the celebrated German Jurist, Fuerback, who died lately at Frankfurt, during a journey undertaken for the benefit of his health, is now generally believed to have been poisoned. He was a kind patron of the unfortunate Casper Hauser, and the most zealous in his endeavour to discover the murderers of that mysterious youth.—[*German Paper*.]

COAL vs. GOLD.—In a work lately published by a Spaniard, there is a comparison between the produce of the gold and silver mines in America and the coal mines in England, from which it appears that the gross value of the annual produce of the coal mines, which is 18,000,000 tons, amounts to 450,000,000 francs, including the wages and other charges; whilst the produce of the gold and silver mines, including the same charges, is only 220,500,000 francs; showing a balance in favor of the coal mines of England, over the gold and silver mines of the New World, of no less a sum than 227,500,000 francs.

The Prince of Orange, if we are to credit the private correspondence of the *Times*, is still suspected of having made away with his wife's jewels, notwithstanding the man named Polari has confessed that he was the thief. It is said that Polari, who might have escaped by taking advantage of a technical blunder in the proceedings against him, appeared eager to be convicted; and now it is supposed he will be pardoned.

SUMMARY.

The Georgetown Union, of the 23d inst., says—"We are informed all the Pee Dee country is under water, and the injury to the rice field banks must, in consequence, be very serious. The tidels for several days past, were higher than we recollect, without the agency of a heavy gale."

CURIOUS PHENOMENON.—The Montreal Herald of 28th, states that—

On Saturday morning, a very singular phenomenon was observable from the river bank in front of our city. Those who are blessed with a very strong sight perceived, as they supposed, an immense number of small birds in the air, but at such a height as to render even birds, in that situation, a curiosity. We happened to be passing, and in vain strained our eyes to discover the objects which others were contemplating with so much eagerness—by the help of a glass, however, we at last perceived what was to all appearance an immense flock of small birds. These objects passed away in millions before the current of the light wind then blowing, but many descended lower than the rest, until easily discernable by the naked eye. At length they approached the earth, and proved to be maple leaves of an unusually large size. Many of them were picked up by the citizens, and we have kept one. Whence they came, or how they got there, are questions which furnish a wide field for conjecture. One shrewd fellow observed, "that this must be the fall of the year in the moon, and that they certainly came from thence."

[From the Baltimore American of Saturday.]

Great Aeronautic Expedition.—The circumstances attending the second splendid balloon ascension of Mr. Mills, on Thursday afternoon, render it one of the most lengthened and interesting aeronautic expeditions ever made. We mentioned in yesterday's paper the particulars of his departure from Fairmount, and the apparent course he had taken; and are now enabled to supply some very interesting details of his long and rapid flight through the upper regions. His first course, after ascending, was about south east, but in a short time a counter current of air wafted him in an opposite or westerly direction, immediately over the city. His flight westward was only as far as a point above the long bridge over the Patuxent, when he encountered an adverse current, which carried him back again in an easterly course.

During all this time Mr. Mills continued to rise, by occasionally throwing out ballast. His compass now proved of no service to him, from the constant rotary motion which the balloon assumed, first swinging round in one direction and then revolving in a contrary one. The course of the balloon was easterly. At forty minutes after five, Mr. M. encountered a violent snow storm, with the thermometer down to 34 deg. Besides being obliged to endure its peltings he was subjected to a thorough drenching from the melted snow, which thawed as it fell on the balloon, and ran down from its neck to the car immediately under it. At the same time, also, a body of clouds passed beneath him, and he lost sight of the earth altogether. The storm, however, soon passed off, and, except the drenching, left him unharmed.

At six o'clock he had attained his greatest elevation, which according to his estimate and the indications of the barometer, was upwards of two miles. The thermometer was now down to 33 deg., or only one degree above freezing point. Mr. M. all the while was going eastwardly, passing over the light house at North Point, and across the expanse of the Chesapeake Bay towards Kent County, on the Eastern Shore. He had now had recourse to his valves, and was gradually descending. After having passed into Kent County about half a mile, he made preparations to land, and had descended within about five hundred feet of the earth, when the balloon was taken by a sudden and violent gust or eddy of wind from the east. This was at 35 minutes after six. In an instant after the wind struck the balloon, it was driven with the swiftness of an arrow, and in the short space of seventeen minutes, he was carried back to North Point, a distance of fourteen miles across the Chesapeake Bay!

Now as heretofore, Mr. M. preserved an undaunted coolness and self possession, and as he was careering across the waters with the fleetness of the wind itself, he discharged gas enough to bring him within two hundred feet of the surface. As the anchors struck the water they rebounded with a force that gave him a pretty distinct notion of the rate at which he was travelling. As soon as he came over the land at North Point, the wind greatly abated, and at ten minutes before seven he effected a safe landing on the farm of Mr. Lynde Goodwin, from whom and his family he received every assistance in securing his balloon and apparatus in perfect order.

His extraordinary most extraordinary aerial voyage, prosecuted for three hours, to the distance of about fifty miles, and for the greater part at an elevation of one to two and a quarter miles. After this feat, Mr. Mills, who, it should be borne in mind, is a young Mechanic of Baltimore—self taught, and

dependent alone on his own unaided efforts,—may fairly take rank with the most successful aeronauts of the age.

The following table shows the observations made by Mr. Mills on the barometer and thermometer, at various periods during his voyage. He left Fairmount at ten minutes before four o'clock, P. M.

TABLE OF OBSERVATION.

Time.	Barometer.	Thermometer.
h. min.	in. 10th.	deg.
3 57	20 6	63
4 15	25 8	59
4 25	24 2	54
4 40	24 1	51
4 55	23 9	43
5 10	23 4	41
5 25	23 0	46
5 40	22 9	34
5 55	22 8	34
6	22 7	33
6 15	53 0	36
6 20	23 4	41
6 25	24 2	58
6 35	27 0	58

Appointments by the Governor, by and with the advice and consent of the Senate, May 3.

New York.—Stephen Allen, Benj. M. Brown, Saul Alley, Charles Dusenbury and William W. Fox, for Water Commissioners for supplying the city of New York with pure and wholesome water.

NAVAL EXAMINATION.—The Board for the examination of Midshipmen whose warrants bear date prior to 1829, will convene at Baltimore on the first Monday of May next. Commodore Jacob Jones will be the President of the Board.

AMERICAN LYCEUM.—The Fourth Annual Meeting of the Society opened yesterday morning in the United States District Court Room, east end of the New City Hall, or Old Alma House.

President Duer presided, and Wm. B. Kinney officiated as Secretary.

Forty-two Delegates were reported from different Lyceums and kindred associations in different States; among others we heard the names of Judge Clayton of Georgia, Hon. Wm. B. Calhoun and A. H. Everett of Massachusetts, Dr. Weeks, President of the New Jersey State Lyceum, &c. Among the invited guests are Don Tomas Gener, the President of the Cortes of Spain, the Marquis Aycena, and other foreigners of distinction.

The morning sessions will commence at 9, and the afternoon at 4. The following subjects will be particularly discussed:

1. The propriety of establishing central schools for the education of teachers.
2. The applicability of the monitorial system to schools generally.
3. Corporal punishments.
4. The means of introducing the elements of natural history into common education.
5. The propriety of teaching the ancient languages in common schools.

Interesting reports and essays may be expected on various subjects.—[Daily Advertiser.]

The following useful Table of Bank Notes received in deposit at our Banks, was politely presented to us yesterday by the receiving Teller of the Phoenix Bank.—[Gazette.]

Farmers' Bank, Troy,
Bank of Troy, do
New York State Bank, Albany,
Canal Bank, do
Mechanics' and Farmers' Bank, do
Saratoga County Bank,
Ulster County Bank,
Bank of Newburgh,
Catskill Bank, Catskill,
Farmers' Bank, do
Westchester County Bank,
Hudson River Bank,
Dutchess County Bank,
Bank of Poughkeepsie,
And \$100 bills only of Troy City Bank.

All denominations received in deposit by the several Banks of this City.

100's of Merchants & Mechanics' Bank, Troy.
100's and 50's of Com'l Bank, Albany.
100's and 50's of Lansingburg Bank.
10's and upwards of Sussex Bank, Commercial Bank of Albany, and Farmers' and Merchants' Bank of Middle Point.
5's and upwards of State Bank, Elizabethtown; State Bank, New Brunswick; State Bank, Newark; State Bank, Moravia; Mechanics' Bank, Newark; Newark Banking Insurance Co.; Farmers' Bank, Rahway; Orange Bank, county of Essex; Norwich Bank.

Splendid Fire Engines.—We do not believe there is in the world a more magnificent thing of the sort, than the new Engine belonging to the Columbian Company, and which that spirited association have been exhibiting to their fellow citizens at the Engine House in the rear of St. Paul's Church, at the corner of Vesey and Church streets. The frame of this elegant machine is of very superior construction, and the ornamental appointments are of the costliest and most tasteful description, as well indeed they may be, since some of our most meritorious artists have been employed in the work. The carving, which is the work of Watkins & Barry, Chatham square, is done in mahogany, but so beautiful is the gilding and bronzing, (by Riley Boardman, 249 William st.) that it would be taken at once for solid metal. The plating is superb, and is by George Rudd, 549 Broadway; the casting by Wallace & Bunce, of Spruce street. The painting is by Weir, and of course is excellent, as well in design as in execution. The back is painted by John Quidor, 46 Canal street, and deserves great praise. The motto of the company—"Actuated by benevolence, impelled by emulation"—is not only beautifully engraved, but is much truer to the intent and nearer to the actual character of our gallant fire companies than most mottos are. The back scene, representing the parting of Otwa and Azula, from the curse of Talhoosin, is uncommonly fine. In short, the whole work reflects the highest credit, as well to the various artists who have been employed in its construction and decoration, as to the deserving Company of enterprising young men to whom it belongs.

By the by, the whole existence of such a body as our firemen—volunteers as they are altogether in arduous, fatiguing, and often perilous duties, seems to us, in a degree, characteristic and peculiar.

In London, the firemen receive regular pay, and are a body apart. In Paris, they are a military corps—*Sapeurs et Pompiers*. In our American cities they are young men of all pursuits, who spend time, labor, and money—much money sometimes, as the decorations of the engine above described will prove—for the general good without any compensation to be named: for the exemption from jury duty and a portion of taxes is nothing in comparison with their sacrifices. Yet there is among these volunteers much skill, and probably more emulation, than in the paid servants or soldiers of other countries.

The Lost Mail.—A letter from the Post Office at Columbia, to the Post Master in this city, dated the 18th, says, "I have been informed that it was the Great Mail which was lost in the river on Sunday last. They have succeeded in getting the way mail out of the river."

THE LOST MAIL FOUND.

Post Office, Camden, April, 21st, 1834.

Mr. MICO:—Sir:—The large Augusta Mail-bag from this Office, that was lost in the river on Sunday the 13th, was found by a negro, nine miles below the Ferry, lodged in a raft, and brought to this Office last evening. It is in a very wet, bad state. Your letters, with the Way-bill dated 12th, were all safe, and I think all the rest will be safe. I am drying and putting them up in as good a state as I can, before I forward them. Yours, &c., T. THORNTON, P. M.

Shipwreck.—The Boston Transcript says—"We have seen a letter from Captain Isaac Percival, of the schr. General Jackson, from this port, on a sealing voyage, dated at the Isle of France, in December last. He states that after leaving St. Salvador (no date given) he proceeded to the Island of St. Paul's, where he found twenty-one poor unfortunate beings, the only survivors of ninety-one men, women and children—crew and passengers of the English ship Lady Monro, cast away there. They had been shipwrecked ten days, but the bodies of the dead remained unburied. After performing the unpleasant task of committing the putrid bodies to the earth, he embarked with the survivors, on board his vessel, and carried them in safety to Port Louis, in the Isle of France. The Lady Monro was commanded by Capt. John Aiken. She sailed from Calcutta on the 27th June, and was wrecked on the night of the 11th October."

We have been informed that a young man, son of Mr. Brass, near Kingston, was attacked and devoured by wolves last week in the woods 14 miles from this place. The young man was connected with some Indians in the vicinity, and had been missing two or three days; search was made and part of his skull, and some other bones were found. Our information

is positive, or else we should be inclined to doubt the report. The wolves are very numerous in the woods this season.—[Kingston (U. C.) Herald.]

STEAMBOAT DISASTER.—A letter to the Postmaster of New York, from Columbus, Geo., announces that the mail boat "Star of the West," plying between New Orleans and Mobile, burst her boiler on the 18th ult.,—killed two persons and injured others—all in confusion, and no mail from New Orleans, says a bill from the Mobile Post Office.

ANOTHER.—The St. Louis Republican of 17th ult., says—"By an arrival from the Upper Mississippi, we learn that the Steamboat *St. Louis*, bound to *Galena*, has burst her boiler, by which 12 or 14 persons were killed."

The accident happened in attempting to pass the Des Moines Rapids. The stern of the boat struck upon a rock and careened her over—the water in the boilers of course running to the lower side. In this situation the boat remained for twenty minutes or half an hour, when she righted, and the sudden return of the water into the boiler produced an instantaneous explosion. The names of the sufferers are—Perkins, the Engineer, killed; Miss More, blown overboard and lost; Mrs. Moore and son, dangerously scalded, and three other children killed; Mrs. Luckett, from Mill Creek, Illinois, badly scalded; Isaac Marx, dying when the account left; three Germans dangerously scalded, and three other persons slightly injured. The *St. Louis* was chartered for the trip from New Orleans to Galena.

There seems to be a considerable excitement among the lawyers, and in the newspapers of Cincinnati, on the subject of a Clerk to the Court. The grounds of the original dissections are not stated, but we notice among the prominent facts, stated in large capitals, the certificate of one of the Judges that an offer of one thousand dollars had been made to him for his influence in obtaining the office for the successful applicant. It must be a snug birth, and as the judge did not take the money, there is a handsome sum saved in the outfit.

THE EARTHQUAKE IN PASTO.

[From the Journal of Commerce.]

PROVINCE OF PASTO, 5th FEBRUARY, 1834.

To the Honorable the Secretary of State for Home and Foreign Affairs.

SIR.—In my communication of the 29th of January, No. 5, I promised, through the medium of your Excellency, to detail to the Supreme Government, the remarkable events occasioned by the Earthquake of the 20th of the same month; and I take the present occasion of fulfilling my promise with reference to whatever information I have received from the Political Chiefs of Pasto and Tuquerres, touching this subject, in compliance with my directions to them.

The Executive ordered a survey to be made of all the buildings which remained standing in the former city; and the result has been, that the ward of Francisco, is ascertained to have suffered least, since the greatest part of the houses in that district, although injured, may be nevertheless inhabited, because they are not bulged out, but the rest of the edifices in the city, which remain not destroyed, would be pulled down to their foundations, from their utter insecurity and their danger to the public; also the number of the dead hitherto found is 51, and of the mutilated 50.

The Temples and Cloisters of Monjas, of Merced, of San Augustin, of San Francisco, and Santa Domingo, must be raised anew from their foundations, as also the churches of San Sebastian and Santiago, the Public Bakery and Town gate.

To restore the cathedral to its former condition will be attended with the least expense of any of the churches; because the steeple and Frontispiece have alone fallen, and the fissures in the main walls are but trifling.

The villages in the neighbourhood of the city of Pasto, namely, Laguna, Mocondino, Buesaquillo, Pejandino, Puertes, Oñchalla, Tamondino, Tongovito, Gualmatan, Pandiaco and Tesucal, have all lost their churches, and the two first named towns lost some of their thatched houses and five of their inhabitants.

The parishes of Malatuy, Yacuanquer, Tambo, Buiaco, Funes, and their neighbouring parishes, have likewise had their churches destroyed, their Plantations and tiled houses; but that lamentable loss of life has not been incurred there, which befel Pasto and the parish of Sibundoy, whither I have sent two Commissioners to examine whether the origin of the

Earthquake may be traced to one of its mountains or lakes.

The Commissioners report, that at the right of a large Lake in the District of Sibandoy, a small rising ground is observed, which has vomited from its bosom large pieces of rock, and that huge and profound caverns are in the neighborhood surrounding the Desert called Bordoncillo; that almost the half of this Desert has been precipitated into the bowels of the Earth and the other part raised as it were above the surface, till it had formed a mountain of similar origin, situate between Sibundoy and Aguatico, which in its formation overspread a great deal of the original soil. The Commissioners further state, that this mountain has, from the successive convulsions of the earth, mouldered away, covering the high roads, and causing the formation of immense marshes in the neighborhood; that portions of the earth, precipitated occasionally from its tops, fell into the bed of the river Balsayaco, and obstructed its course, the sudden and impetuous overflow of which destroyed the lands and houses of the people of Santiago, forcing its waters even as far as Pitumayo, being increased by nearly ninety tributary streams; and they state that the church and ten houses have been reduced to ruins, and the remainder of the inhabitants have fled into a high mountain, with all the images which they were able to save from the wreck. Almost the whole of this Canton is overspread with large abysses, principally in the parish of Yacuanquer, where its numerous eruptions have fortunately not disturbed the course of the river Guatara.

The Churches of the Parishes Zunasuyes and Ipiales of the District of Tuquerres have been likewise overthrown: and there considerable chasms in the territory of Guachual, but Divine Providence has graciously been pleased to preserve its inhabitants from other evils.

Motions of the earth are even still felt there, and its frightful growlings terrify us every instant, and the one as well as the other, are felt to proceed from that part of Mocoa, whence they seem to originate; but up to this moment I have had no account of that unfortunate people. The heat of the sun has been excessive and destructive of the crops, but it has moderated since morning, and rained heavily last night, which affords us much consolation, as it prognosticates approaching winter.

Hoping your Excellency will be pleased to communicate the above to the proper authority, may God preserve your Excellency many years.

THOMAS ESPANA.

CIRCULAR.

Colombia, State of New Granada, Home and Foreign Office, Bogota, February 11, 1834.

ON HIS EXCELLENCY

The Governor of the Province of —

On the 20th of January last, at seven o'clock, in the morning, the City of Pasto had been converted into ruins in an instant, by a violent earthquake, followed up by continual motions of the earth, and occasional severe shocks, which were felt even to the eve of the 22nd at the moment of the departure of the last post. More than fifty dead bodies, and as many others in an expiring state have been already extracted in the rubbish on the remote outskirts of the city; and a nameless multitude of victims are altogether buried beneath the wreck. The infection of the air and the absolute state of destitution, being without clothes or food, to which those are reduced, who have survived this lamentable catastrophe, in a season of extraordinary heat by day, and more rigorous frosts by night, give menacing forebodings of an approaching plague. The desolating effects of the season, itself seorching up the crops or nipping them in their bud, threaten the surrounding country with a future famine. Similar scenes of misery and of death, have been exhibited amongst all the neighboring villages, and must also have taken place in the other towns of the Province, situated to the South, and which are of most importance, because the movement of the Earth has taken its origin and direction, from the Volcanoes of the Province of Imbabura in the State of the Equator, and it is known likewise that this Earthquake has destroyed the City of Almaguer, which is in the meridian of the City of Popayan.

To events of such dismal and affecting nature, neither the Government nor the inhabitants of New Granada can be insensible or indifferent.

The President has given for transmission by the Post which departs to-morrow morning, three thousand dollars, to relieve the first necessities of the loyal and industrious PASTURIANS. But this scanty supply being disproportionate to the pressing wants of the survivors, I am directed hereby to request

your Excellency will solicit other greater and suitable contributions from the patriotism and philanthropy of the inhabitants of your Province, who, persuaded, will not be deaf to the cries of afflicted humanity. In the following parts of the Province of Popayan, a subscription has been collected for the sufferers, to which almost all have contributed with a prompt and generous liberality; and Pasto will quickly re-ascend from its ruins, if all the other districts of the Republic but imitate this laudable example, in fulfilling a solemn and sacred duty.

LINO DE POMA.

A good STORY.—"One seldom hears a good story now-a-days: the following is not bad. A year or two ago there came to the Lion, at —, a pleasant-looking, bustling, great-coated, commercial-traveller sort of a body. 'Well, landlord, what have you got, rump steak, eh? oyster sauce, eh? bottle of sherry, good, eh? send 'em up.' Dinner was served, the wine despatched, and a glass of brandy and water comfortably settled the dinner."

'Waiter,' said the traveller, coolly and dispassionately wiping his mouth with a napkin, 'Waiter I am awkwardly situated.'

'Sir?' said the waiter, 'expecting a love-letter?'

'I cannot pay you.'

'Sorry for that, sir; I must call master.'—(Enter landlord.)

'My good sir, you see this is rather awkward—good dinner! capital! famous wine! glorious grog!—but no cash.'

The landlord looked black.

'Pay next time—often come this road—done nothing to-day—good house yours—a great deal in the bill way.'

The landlord looked blue.

'No difference to you, of course?—pleasant house here—plenty of business—happy to take your order—long credit—good bill.'

'There is my bill, sir—prompt payment—I pay as I go.'

'Ah, but I must go without paying. Let us see—bill 17s. 6d. let us have a pint of sherry together—make it up a pound—that will square it.'

'Sir, I say you are a swindler, sir!—I will have my money.'

'Sir, I tell you I will call and pay you in three weeks from this time exactly, for I shall have to pass this road again.'

'None of that, sir—it won't do with me—pay my money, or I'll kick you out.'

The stranger remonstrated—the landlord kicked him out.

'You will repent of this,' said he stranger.

The landlord did repent it. Three weeks after that day, punctual to his word the stranger re-entered the Lion Inn—the landlord looked very foolish—the stranger smiled, and held out his hand—'I've come to pay you my score, as I promised.'

The landlord made a thousand apologies for his rudeness.—So many swindlers about, there's no knowing whom to trust. Hoped the gentleman would pardon him. 'Never mind, landlord; but come, let's have some dinner together—let us be friends. What have you got, eh?—a couple of boiled fowls, eh?—nice little ham of your own curing? good!—greens from your own garden? famous!—bottle of sherry and two bottles of port—waiter, this is excellent.'

Dinner passed over—the landlord hobbled and nobbed with the stranger—they passed a pleasant afternoon. The landlord retired to attend to his avocations—the stranger finished his 'comforter' of brandy and water, and addressed the waiter—

'Waiter, what is to pay?'

'Two pounds ten shillings and threepence, sir, including the former account.'

'And half a crown for yourself?'

'Makes two pounds twelve shillings and ninepence, sir,' replied the waiter, rubbing his hands.

'Say two pounds thirteen shillings!' said the stranger, with a benevolent smile, 'and call in your master.'

(Enter landlord, smiling and hospitable.)—'Sorry you are going so soon, sir.'

The stranger merely said, with a fierce look, 'I owed you seventeen and sixpence, three weeks ago, and you kicked me out of your house for it.'

The landlord began to apologize.

'No words, sir; I owed you seventeen and sixpence, and you kicked me out of your house for it. I told you you would be sorry for it. I now owe you two pounds thirteen shillings, (and quietly turning aside his coat-tail,) you must pay yourself by a check on the same bank; for I have no money now.—[Bell's Weekly Messenger.]

Cholera in the West.—The New Orleans *Rec.*, of the 24th ult. says: "The Cholera had broken out on board the steamer Philadelphia—She landed a detachment of U. S. troops at Montgomery's Point on Sunday morning, the commanding officer of which, stated to our informant that six of his corps had been attacked with the disease, one of whom had died; two others were supposed to be dangerous—There had been a few cases among the passengers of the boat, one of whom had died.—[Charleston Patriot.]

In our paper of yesterday morning, we stated that the "Etna" of H. B. Majesty's navy, had impressed two men from the American ship "Rosanna," of Boston, commanded by Capt. George H. Jennings, while lying in port Praya, St. Jago, although no other sailors could be obtained in that port. It may not therefore be amiss to state, that by a letter dated 17th Feb. ult. we learn that Capt. J. protested against him in the usual form: upon this the 1st lieutenant of the "Etna" challenged him to fight. On the American captain's offering the terms on which he would accept the challenge, namely, to fight across a table with pistols, the British officer declined.

The commander of the "Rosanna" was presented with a handsome silver set by his passengers, while lying in the said port, in testimony of their approval of his conduct during the voyage from Havana.—[Daily Adv.]

Texas.—This country is likely to be convulsed in civil war, in consequence of the imprisonment of Col. Austin, founder of Austin's colony. The Colonel is accused by the Mexican government of having excited the colony to insurrection, and driving away the Mexican troops. The Colonel is now undergoing his trial in the city of Mexico, and fears are entertained for his life. Should he be executed, his death will be revenged, and a civil war must be the result.—[N. O. Mer. Adv.]

List of Subscribers to the Railroad Journal who have paid in advance to Jan. 1, 1835, continued from April 19, 1834.

T. H. Rochester, Rochester, N. Y.
E. & J. A. Sehr, Philadelphia, Pa.
B. Woodward, Abbeville, Ohio
C. J. Blauvelt, Blauveltville, N. Y.
Jas. McCawley, Marksville, La.
P. G. Voorhies, Marksville, La.
J. W. Lincoln, Worcester, Mass.
A. B. Linton, Athens, Geo.
John Randall, Jr., Ithaca, N. Y.
G. T. Bedell, Philadelphia, Pa.

TOWNSEND & DUFFEE, of Palmyra, Manufacturers of Railroad Rope, having removed their establishment to Hudson, under the name of *Duffee, May & Co.* offer to supply Rope of any required length (without splice) for inclined planes of Railroads at the shortest notice, and deliver them in any of the principal cities in the United States. As to the quality of Rope, the public are referred to J. B. Jarvis, Eng. M. & H. R. Co., Albany; or James Archibald, Engineer Hudson and Delaware Canal and Railroad Company, Carbon Dale, Luzerne county, Pennsylvania.
Hudson, Columbia county, New York, }
January 29, 1835.

RAILWAY IRON.

Ninety-five tons of 1 inch by 1/2 inch, Flat Bars in lengths of 14 to 16 feet counter sunk holes, ends cut at an angle of 45 degrees with splicing plates, nails to suit.

350 ds. of Edge Rails of 36 lbs. per yard, with the requisite chairs, keys and pins.
Wrought Iron Pins of 30, 33, and 36 inches diameter for Wheels of Railway Cars, and of 60 inches diameter for Locomotive wheels.

Axis of 24, 26, 30, 32, 34, and 36 inches diameter for Railway Cars and Locomotives of patent iron.

The above will be sold free of duty, to State Governments and Incorporated Governments, and the Drawback taken in port payment.

A. & G. RALSTON.
9 South Front street, Philadelphia.

TO IRON MANUFACTURERS AND OWNERS OF IRON ORE BEDS.

JOSEPH GOULDING, of Koseville, Essex county, N. Y., has invented and patented a *Magnetic Separating Machine*, for separating Iron Ore from the extraneous matter usually found in connection with it; and he begs leave to recommend it to the special notice of owners of Ore Beds as possessing qualities of great importance, as by the use of many ore beds can be made very valuable, it being applicable in all cases when the Ore is magnetic.

The quality of the iron made is much improved by the process of separation. Indeed good iron can, after separation, be made from ore which would without it be considered not worth working. There is also found to be a great saving in the transportation of ore, and in time and fuel required to work the same into iron.

Mechanics can be furnished at short notice which will separate from half a ton to twenty tons each in twenty-four hours.

J. Goulding also manufactures to order, *Cylindrical Forges and Blast Furnace Bellows*, of the most improved construction, and which are successfully used in nearly all the Forges and Furnaces in Clinton and all the adjoining counties.

January 30th, 1835.

LOCOMOTIVE ENGINES.

THE AMERICAN STEAM CARRIAGE COMPANY, OF PHILADELPHIA, respectfully inform the public, and especially Railroad and Transportation Companies, that they have become sole proprietors of certain improvements in the construction of Locomotive Engines, and other railway carriages, secured to Col. Stephen H. Long, of the United States Engineers, by letters patent from the United States, and that they are prepared to execute any orders for the construction of Locomotive Engines, Tenders, &c. with which they may be favored, and pledge themselves to a punctual compliance with any engagements they may make in reference to this line of business.

They have already in their possession the requisite apparatus for the construction of three classes of engines, viz. engines weighing four, five, and six tons.

The engines made by them will be warranted to travel at the following rates of speed, viz. a six ton engine at a speed of 15 miles per hour; a five ton engine at a speed of 18 miles per hour; a four ton engine at a speed of 22 1/2 miles per hour. Their performance in other respects will be warranted to equal that of the best English engines of the same class, with respect not only to their efficiency in the conveyance of burthens, but to their durability, and the cheapness and facility of their repairs.

The engines will be adapted to the use of anthracite coal, pine wood, coke, or any other fuel hitherto used in locomotive engines.

The terms shall be quite as favorable, and even more moderate, than those on which engines of the same class can be procured from abroad.

All orders for engines, &c. and other communications in reference to the subject, will be addressed to the subscriber, in the city of Philadelphia, and shall receive prompt attention.

By order of the Company,

WILLIAM NORRIS, Secretary.

December 2d, 1833.

For further information on this subject see No. 40, page 772 of this Journal.

RAILROAD TURNOUTS, REVOLVING PLATFORMS AND SIDELINGS.

The subscriber having been for some years engaged in constructing turnouts, and inserting the necessary switches and fixtures appertaining to the same, on the Baltimore and Ohio Railroad, and as those works on that road will be shortly completed, he is desirous of being employed by any Railroad Company requiring work of the above description.

He will either contract at a fixed price to execute the work, he providing all the necessary materials and fixtures, or otherwise—or he will engage himself at a stated salary.

In relation to his abilities and general character he begs to refer any Company, disposed to engage him, to the Baltimore and Ohio Railroad Company.

Letters can be addressed to him at the Office of Construction Baltimore and Ohio Railroad, Baltimore.

236 St.

REUBEN ALER.

SURVEYORS' INSTRUMENTS.

Compasses of various sizes and of superior quality warranted.

Leveling Instruments, large and small sizes, with high magnifying powers with glasses made by Troughton, together with a large assortment of Engineering Instruments, manufactured and sold by

E. & G. W. BLUNT, 154 Water street, corner of Maidenlane.

ENGINEERING AND SURVEYING INSTRUMENTS.

The subscriber manufactures all kinds of Instruments in his profession, warranted equal, if not superior, in principles of construction and workmanship to any imported or manufactured in the United States; several of which are entirely new: among which are an Improved Compass, with a Telescope attached, by which angles can be taken with or without the use of the needle, with perfect accuracy—also, a Railroad Goniometer, with two Telescopes—and a Levelling Instrument, with a Goniometer attached, particularly adapted to Railroad purposes.

WM. J. YOUNG,
Mathematical Instrument Maker, No. 9 Dock street, Philadelphia.

The following recommendations are respectfully submitted to Engineers, Surveyors, and others interested.

Baltimore, 1832.

In reply to thy inquiries respecting the instruments manufactured by thee, now in use on the Baltimore and Ohio Railroad. I cheerfully furnish thee with the following information. The whole number of Levels now in possession of the department of construction of thy make is seven. The whole number of the "Improved Compass" is eight. These are all exclusive of the number in the service of the Engineer and Graduation Department.

Both Levels and Compasses are in good repair. They have in fact needed but little repairs, except from accidents to which all instruments of the kind are liable.

I have found that thy patterns for the levels and compasses have been preferred by my assistants generally, to any others in use, and the Improved Compass is superior to any other description of Goniometer that we have yet tried in laying the rails on this Road.

This instrument, more recently improved with a reversing telescope, in place of the vane sight, leaves the engineer scarcely any thing to desire in the formation or convenience of the Compass. It is indeed the most completely adapted to later angles of any simple and cheap instrument that I have yet seen, and I cannot but believe it will be preferred to all others now in use for laying of rails—and in fact, when known, I think it will be as highly appreciated for common surveying.

Respectfully thy friend,

JAMES P. STABLER, Superintendent of Construction of Baltimore and Ohio Railroad.

Philadelphia, February, 1833.

Having for the last two years made constant use of Mr. Young's "Patent Improved Compass," I can safely say I believe it to be much superior to any other instrument of the kind, now in use, and as such most cheerfully recommend it to Engineers and Surveyors.

E. M. GILL, Civil Engineer.

For a year past I have used instruments made by Mr. W. J. Young, of Philadelphia, in which he has combined the properties of a Theodolite with the common Level.

I consider these instruments admirably calculated for laying out Railroads, and can recommend them to the notice of Engineers as preferable to any others for that purpose.

HENRY R. CAMPBELL, Eng. Philad.,
German and Norristown Railroad

STEPHENSON.

Builder of a superior style of Passenger Cars for Railroads
No. 264 Elizabeth street, near Bleecker street,
New-York.

RAILROAD COMPANIES would do well to examine these Cars; a specimen of which may be seen on that part of the New-York and Harlem Railroad, now in operation.
J35 tr

RAILROAD CAR WHEELS, BOXES AND OTHER RAILROAD CASTINGS.

Also, AXLES furnished and fitted to wheels complete at the Jefferson Cotton and Wool Machine Factory and Foundry, Paterson, N. J. All orders addressed to the subscribers at Paterson, or 60 Wall street, New-York, will be promptly attended to. Also, CAR SPRINGS.

Also, Flange Tires turned complete.

J9 ROGERS, KETCHUM & GROSVENOR.

NOVELTY WORKS,

Near Dry Dock, New-York.

THOMAS B. STILLMAN, Manufacturer of Steam Engines, Boilers, Railroad and Mill Work, Lathes, Presses, and other Machinery. Also, Dr. Nott's Patent Tubular Boilers, which are warranted, for safety and economy, to be superior to any thing of the kind heretofore used. The fullest assurance is given that work shall be done well, and on reasonable terms. A share of public patronage is respectfully solicited.
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INSTRUMENTS.

SURVEYING AND NAUTICAL INSTRUMENT MANUFACTORY.

EWING & HEARTTE, at the sign of the Quadrant, No. 53 South street, one door north of the Union Hotel, Baltimore, beg leave to inform their friends and the public, especially Engineers, that they continue to manufacture to order and keep for sale every description of Instruments in the above branches, which they can furnish at the shortest notice, and on fair terms. Instruments repaired with care and promptitude.

For proof of the high estimation on which their Surveying Instruments are held, they respectfully beg leave to tender to the public perusal, the following certificates from gentlemen of distinguished scientific attainments.

To Ewing & Heartte.—Agreeably to your request made some months since, I now offer you my opinion of the instruments made at your establishment, for the Baltimore and Ohio Railroad Company. This opinion would have been given at a much earlier period, but was intentionally delayed, in order to afford a longer time for the trial of the instruments, so that I could speak with the greater confidence of their merits, if such they should be found to possess.

It is with much pleasure I can now state that notwithstanding the instruments in the service procured from our northern cities are considered good, I have decided preference for those manufactured by you. Of the whole number manufactured for the Department of Construction, to wit: five Levels, and five of the Compasses, not one has required any repairs within the last twelve months, except from the occasional imperfection of a screw, or from accidents, to which all instruments are liable. They possess a firmness and stability, and at the same time a neatness and beauty of execution, which reflect much credit on the artists engaged in their construction.

I can with confidence recommend them as being worthy the notice of Companies engaged in Internal Improvements, who may require Instruments of superior workmanship.

JAMES P. STABLER,

Superintendent of Construction of the Baltimore and Ohio Railroad.

I have examined with care several Engineers' instruments of your Manufacture, particularly Spirit Levels, and Surveyors' Compasses; and take pleasure in expressing my opinion of the excellence of the workmanship. The parts of the levels appeared well proportioned to secure facility in use, and accuracy and permanency in adjustments.

These instruments seemed to me to possess all the modern improvement of construction, of which so many have been made within these few years; and I have no doubt but they will give every satisfaction when used in the field.

WILLIAM HOWARD, U. S. Civil Engineer.

Baltimore, May 1st, 1833

To Messrs Ewing and Heartte.—As you have asked me to give my opinion of the merits of those instruments of your manufacture which I have either used or examined, I cheerfully state that as far as my opportunities of my becoming acquainted with their qualities have gone, I have great reason to think well of the skill displayed in their construction. The neatness of their workmanship has been the subject of frequent remark by myself, and of the accuracy of their performance I have received satisfactory assurance from others, whose opinion I have respect, and who have had them for a considerable time in use. The efforts you have made since your establishment in this city, to relieve us of the necessity of sending elsewhere for what we may want in our line, deserve the unqualified approbation and our warm encouragement. Wishing you all the success which your enterprise so well merits, I remain, yours, &c.

B. H. LATROBE,

Civil Engineer in the service of the Baltimore and Ohio Railroad Company.

A number of other letters are in our possession and might be introduced, but are too lengthy. We should be happy to submit them, upon application, to any person desirous of perusing the same.